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JUSTINIAN THE GREAT (A. D. 527-565).

PERHAPS the most crucial period of Christian history, after the foundation century of Christ and the Apostles, is the sixth century of our era. Then goes on a kind of clearing-house settlement of the long struggle between Christianity and paganism. It was no false instinct that made Dionysius the Little begin, precisely about the middle of that century, to date his chronology from the birth of Christ, for then disappeared from daily use the oldest symbols of that pagan civil power which had so strenuously disputed with the new religion every step of its progress. The annual consulship was then abolished, or retained only by the Emperor as an archaic title. That immemorial root of Roman magistracy, that thrice-holy symbol of the City's Majestas, could rightly pass away when the City had fulfilled its mission and function in the ancient world. The Roman Senate, too, passed away at the same period—what calls itself the Roman Senate at a later time is a purely local and municipal institution. The old religion of Rome was finally no more than a memory. For the two preceding centuries it had gone on, sullenly shrinking from one strata of society to another, until its last representatives were an individual here and there, hidden in the mighty multitudes of the Christian people of the Empire.[1] The

[1] V. Schultze: "Untergang des griechisch-roemischen Heidentums," Jena, 1892, vol. II., pp. 385-389; cf. also pp. 214-215. The documents for the disappearance of paganism are best collected in Buegnot, "Histoire de la déstruction du paganisme en Occident." 2 vols. Paris, 1835. Since then it is the subject of many learned works.

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schools of literature, philosophy and rhetoric were no longer ensouled with the principles of Hellenism. Their last hope was buried when the Neoplatonists of Athens took the road of exile to beg from the Great King, that born enemy of the Roman name—the prophet of "Medism"—a shelter and support.[2] In dress, in the system of names, in the popular literature, in the social institutes, in the spoken language,[3] in the domestic and public architecture, in the spirit of the law, in legal procedure, in the character of city government, in the administration of the provinces, in the very concept of the State and of Empire, there are so many signs that the old order passeth away and a new one even now standeth in its place. The symptoms of internal trouble, noted on all sides from the time of Marcus Aurelius and graphically diagnosed by St. Cyprian, had gone on multiplying. They did not portend that decay which is the forerunner of death, as many had thought while the ancient society was dissolving before their eyes,[4] but that decay which is the agent of great and salutary changes. Their first phase, the long and eventful Wandering of the Nations, had broken up, East and West, the old framework of society as the Greek and Roman had inherited, created or modified it. On the other hand, that most thorough of all known forces, the spirit of Jesus Christ, had been working for fifteen generations in the vitals of this ancient society, disturbing, cleansing, casting forth, healing, binding, renovating a social and political organism that

"Lay sick for many centuries in great error."

In such periods of history much depends on the ideals and character of the man or men who stand at the helm of a society that is working its way through the straits and shoals of transition. Was it not fortunate for Europe that a man like Charlemagne arose on the last limits of the old classical world, with heart and brain and hand enough to plan and execute a political basis sufficiently strong to hold for centuries to come the new states of Western Christendom?

It is here that Justinian enters on the stage of history and claims a place higher than that of Charlemagne, second to that of no ruler who has affected for good the interests of his fellow-men. He is not, I admit, a very lovable figure. He stands too well within the limits of the Græco-Roman time to wear the illusive halo of Teutonic romance. But in the history of humankind those names shine long-

[2]Gregorovius, "Geschichte der Stadt Athen im Mittelalter," vol. I., p. 58, does not believe that any formal edict was issued by Justinian against the continuance of the pagan schools; they lapsed into desuetude.

[3]Sic quodcumque nunc nascitur mundi ipsius senectute degenerat, ut nemo mirari deberat singula in mundo deficere cœpisse, cum ipse jam mundus totus in defectione sit et fine. St. Cyprian, "Ad Demetrianum, c. 4, ed. Hartel.

[4]Bury: "The Language of the Romaioi in the Sixth Century," "History of Later Roman Empire," II., 167-174; Freeman: "Some Points in the Later History of the Greek Language," "Journal of Hellenic Studies," vol. III. (1882); Tozer: "The Greek-speaking Population of Southern Italy," ibid (1889), X., pp. 11-42.

est and brightest which are associated with the most universal and permanent benefits. Is he a benefactor of society who makes two blades of grass to grow where but one grew before? Then what shall we say of one who established for all time the immortal principles of order and justice and equity, without which all human endeavor is uncertain and usually sinks to the lowest level?[5]

I.

Justinian was born in 482 or 483, near Sardica, the modern Sophia and capital of the present kingdom of Bulgaria. The most brilliant of his historians says that he came of an obscure race of barbarians.[6] Nevertheless, in an empire every soldier carries a marshal's bâton

[5]The principal authority for the life and works of Justinian is the contemporary Procopius, the secretary and lieutenant of Belisarius. In his account of the Gothic, Vandal and Persian wars he exhausts the military history of the empire. His work on the buildings of Justinian, and the Anecdota or "Secret History" that bears his name, are entirely devoted to the Emperor, the former in adulation, the latter in virulent condemnation. Agathias, also a contemporary, has left us an unfinished work on the reign of Justinian that deals chiefly with the wars of 552-558. To John Lydus, one of the imperial officers, we owe an account of the civil service under Justinian. Theophanes, a writer of the end of the sixth century, has left some details of the career of the Emperor. The "Church History" of Evagrius and the "Breviarium" of the Carthaginian deacon Liberatus are of first-class value for the ecclesiastical events. His own laws (Codex Constitutionum and Novellæ) and his correspondence, *e. g.*, with the Bishops of Rome, are sources of primary worth, as are also at this point the "Liber Pontificalis" and the correspondence of the Popes with Constantinople. In his chapters on Justinian, Gibbon followed closely Le Beau, "Histoire du Bas Empire," Paris, 1757-1784. Among the general historians of Greece in the past century who deal with the events of this reign are to be named Finlay, "A History of Greece" from its Conquest by the Romans to the present time (146 B. C. to 1864 A. D.); new and revised edition by H. F. Tozer. Oxford, 1877. 7 vols.; Bury: "A History of the Later Roman Empire from Arcadius to Irene" (395-800). 2 vols. London, 1887. The German histories of Greece by Hopf (1873), Hertzberg (1876-78), Gregorovius (histories of mediæval Rome and Athens, 1889) and the modern Greek histories of Paparrigopoulos (1887-88) and Lambros (1888) cover the same ground, though they differ considerably in method and appreciations. There is an "Histoire de Justinien" (Paris, 1856) by Isambert, very superficial and imperfect, and a life of the Empress by Debidour, "L'Impératrice Théodora" Paris, 1885), to which may be added Mallet's essay on Theodora in the "English Historical Review" for January, 1887. Several essays of Gfrörer in his "Byzantinische Geschichten" (Graz. 3 vol., 1872-77), notably pp. 315-401, are both instructive and picturesque. For all questions of chronology pertaining to the reign of Justinian the reader may consult the classic work of Clinton, "Fasti Romani: The Civil and Literary Chronology of Rome and Constantinople." Oxford. 2 vols., 1845-50 (to A. D. 641); cf. also Muralt, "Essai de Chronographie Byzantine." St. Petersburg. 2 vols., 1855-73, and H. Gelzer, "Sextus Julius Africanus." Leipzig, 1880-1885.

An attempt has been made to collect the Greek Christian inscriptions from the fifth to the eighteenth century. "Inscriptions Grecques Chrétiennes." St. Petersburg, 1876-80, pp. 11-143. Mgr. Duchesne and M. Homolle promise a complete "Corpus." Cf. "Bulletin Critique," 1900, October 5, p. 556. The coins and medals of the period are best illustrated in Schlumberger's "Sigillographie de l'Empire Byzantin," Paris, 1884, a work that rounds out and replaces the earlier treatises of De Saulcy, Banduri, Eckel and Cohen.

[6]It is worth noting that the Slavonic origin of Justinian has lately been called in question by James Bryce, "English Historical Review," II., 657-686 (1887). It is said to have no other foundation than the biography by a certain Bogomilus or Theophilos, an imaginary teacher of Justinian. This biography is not otherwise mentioned or vouched for than in the Latin life of Justinian by Johannes Marnavich, Canon of Sebenico (d. 1639). Bryce holds that Marnavich gives us only echoes of a Slavonic saga about Justinian. Jiricêk (Archiv fuer Slavische Philologie, II., 300-304) (1888), condemns the whole story as a forgery of Marnavich. Thereby would fall to the ground all that Alemannus, the first editor of the Anecdota of Procopius (1623) writes concerning the Slavonic genealogy, name, etc., of Justinian. Cf. Krumbacher, "Geschichte der byzantinischen Literatur." Munich, 1891, p. 46.

in his knapsack, and an uncle of Justinian was such a lucky soldier. Justin I. (518-527) may have been quite such another "paysan du Danube" as Lafontaine describes in one of his most perfect fables. (XI. 6).

> "Son menton nourrissait une barbe touffue.
> Toute sa personne velue
> Représentait un ours, mais un ours mal léché.
> Sous un sourcil épais il avait l'œil caché,
> Le regard de travers, nez tortu, grosse lèvre:
> Portait sayon de poil de chèvre,
> Et ceinture de joncs marins."

He may have been not unlike the good Ursus in "Quo Vadis," or that uncouth Dacian in "Fabiola." Certain it is that in a long service of fifty years he rose from rank to rank and succeeded with universal consent to Anastasius when that hated "Manichæan" died childless. The peasants of Dacia were no longer butchered to make a Roman holiday—the land had long been romanized, had even furnished the Empire with a succession of strong and intelligent rulers, those Illyrian Emperors whom Mr. Freeman has so magisterially described. Justin was an uneducated barbarian, and cut his signature painfully through a gold stencil plate, as did his contemporary, the great Ostrogoth Theodoric, King of Italy. Yet he had the wisdom of experience, the accumulated treasures of the sordid Anastasius, the counsel of good civil officers, old and tried friends in many an Isaurian, many a Persian campaign. Above all, he had the devotion of his youthful nephew, Justinian. Possible pretenders to the throne were removed without scruple—a principle that has always been prevalent by the Golden Horn. Before Justin died his nephew had reached the command of all the imperial forces, though never himself a warlike man. In 527, on the death of his uncle, he found himself, at the age of thirty-six, sole master of the Roman Empire.

It was no poor or mean inheritance even then, after the drums and tramplings of a dozen conquests. The West, indeed, was gone—it seemed irretrievably. At Pavia and Ravenna the royal Ostrogoth governed an Italian State greater than history has seen since that time. At Toulouse and Barcelona the Visigoth yet disposed of Spain and Southern Gaul. At Paris and Orléans and Soissons the children of Clovis meditated vaguely an Empire of the Franks. The Rhineland and the eternal hills of Helvetia, where so much genuine Roman blood had been spilled, were again a prey to anarchy. Britain, that pearl of the Empire, was the scene of triumphant piracy, the new home of a half dozen Low-Dutch sea tribes that had profited by the great State's hour of trial to steal one of her fairest provinces, and were obliterating in blood the faintest traces of her civilizing presence. Even in the Orient, where the Empire stood rock-like, fixed amid the seething waters of the Bosphorus, the Hellespont and

the Euxine, it knew no peace. The ambition of the Sassanids of Persia threatened the vast level plains of Mesopotamia, while a new and inexhaustible enemy lifted its savage head along the Danube frontier—a vague complexus of Hunnish and Slavonic tribes, terrible in their numbers and their indefiniteness, thirsting for gold, amenable to no civilization, rejoicing in rapine and murder and universal disorder. Justinian must have often felt, with Henry the Fourth, that the wet sea-boy, "cradled in the rude imperious surge," was happier than the King. Withal, the Empire was yet the only Mediterranean State. Syria and Egypt were its. Asia Minor was faithful. The Balkan provinces, though much troubled, and poor harassed Greece, were imperial lands.[7] The Empire alone had navies and a regular army, drilled, equipped, officered.[8] Alone as yet it had the paraphernalia of a well-appointed and ancient State—coinage, roads, transportation, justice, law, sure sanction, with arts and literature and all that is implied in the fair old Latin word *humanitas*. It stood yet for the thousand years of endeavor and progress that intervened from Herodotus to Justinian. And well it was for humanity that its destinies now passed into the hands of one who was penetrated with the keenest sense of responsibility to God and man. Though he reached the highest prize of life before his prime, it has been said of him that he was never young. The ashes of rebellion and insurrection had been smoldering in the Royal City since, with the death of Marcian (457), the old firm Theodosian control had come to an end. The frightful political consequences of the great Monophysite heresy that was born with the Council of Chalcedon (451) were dawning on the minds of thoughtful men. The Semitic and Coptic Orient was creating that shibboleth which would serve it for a thousand years against Greek and Roman—a blind and irrational protest against the real oppressions and humiliations it once underwent. Of its own initiative the Empire had abandoned, for good or for ill, its historical basis and seat—Old Rome. It had quitted the yellow Tiber for the Golden Horn, to be nearer the scene of Oriental conflict, to face the Sassanid with the sea at its back, to create a suitable forum for the government of the world, where Christian principles might prevail, and where a certain inappeasable Nemesis of secular wrong and injustice would not haunt the imperial soul as on the Palatine. But in the change of capital one thing was left behind; perhaps it was irremovable—the soul of Old Rome, with

[7]The political geography of the Empire in the sixth century may be studied in "Hieroclis Synecdemus," ed. of Gustav Parthey. Berlin, 1866. Here are reprinted the "Notitiæ Episcopatuum" or catalogues of ecclesiastical divisions known usually as the "Tactica." Cf. also Banduri, "Imperium Orientale." Paris, 1711 (fol.) "Antiquitates Constantinopolitanæ," ibid (fol.) 1729.

[8]Gfrörer: "Byzantinische Studien," II., pp. 401-436, "Das byzantinische Seewesen."

all its stern and sober qualities, its practical cast and temper, its native horror of the shifty mysticism of the Orient and the unreality of the popular forms of Greek philosophy. There is something pathetic in that phrase of Gregory the Great, "The art of arts is the government of souls. It is like an echo of the sixth book of Vergil, "Tu vero, Romane, imperare memento."

Perhaps this is the germ of solid truth in the legend that Constantine abandoned the civil authority at Rome to Pope Silvester. He certainly did abandon to the oldest and most consistent power on earth, a power long since admired by an Alexander Severus and dreaded by a Decius, that rich inheritance of prestige and authority which lay embedded in the walls and monuments of ancient Rome. Within a century something of this dawned on the politicians of Constantinople and lies at the bottom of the long struggle to help its bishop to the ecclesiastical control of the Orient. In history there are no steps backward, and we need not wonder that Dante, the last consistent, if romantic, prophet of the Empire, was wont to shiver with indignation at the thought of the consequences of this act.

But if they lost the genuinely Roman soul of government they gained a Greek soul. It was an old Greek city they took up—Byzantium. Its very atmosphere and soil were reeking with Hellenism, whose far-flung outpost it had long been. History, climate, commerce, industries, the sinuous ways of the sea, the absence of Roman men and families, the contempt for the pure Orientals, forced the Emperors at Constantinople from the beginning into the hands of a genuine local Hellenism that might have shed its old and native religion, but could not shed its soul, its immortal spirit. Henceforth the world was governed from a Christianized Hellenic centre.[9] This meant that government for the future was to be mingled in an ever increasing measure with metaphysics; that theory and unreality, the dream, the vision, the golden hope, all the fleeting elements of

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[9] "The Greek characteristics of the Empire under Justinian are calculated to suggest vividly the process of ebb and flow which is always going on in the course of history. Just ten centuries before Greek Athens was the bright centre of European civilization. Then the torch was passed westward from the cities of Hellenism, where it had burned for a while, to shine in Latin Rome. Soon the rivers of the world, to adopt an expression of Juvenal, poured into the Tiber. Once more the brand changed hands; it was transmitted from the temple of Capitoline Jupiter, once more eastward, to a city of the Greek world—a world, however, which now disdained the impious name 'Hellenic' and was called 'Romaic.' By the shores of the Bosphorus, on the acropolis of Græco-Roman Constantinople, the light of civilization lived pale, but steady, for many hundred years—longer than it had shone by the Ilissus, longer than it had gleamed by the Nile or the Orontes, longer than it had blazed by the Tiber, and the Church of St. Sophia was the visible symbol of as great a historical idea as those which the Parthenon and the temple of Jupiter had represented, the idea of European Christendom. The Empire at once Greek and Roman, the ultimate results to which ancient history, with Greek history and Roman, had been leading up was for nine centuries to be the bulwark of Europe against Asia, and to render possible the growth of the nascent civilization of the Teutonic nations of the West by preserving the heritage of the old world." Bury: "History of the Later Roman Empire," II. 39.

life, were to have a large share in the administration of things civil and ecclesiastical. Government was henceforth

"Sicklied o'er with the pale cast of thought."

Cato, it is said, chased the Greek philosophers from Rome. They one day mounted the throne in their worst shape, the shape of the sophist, in the person of Marcus Aurelius; but, indeed, they had no proper place in Rome, where government has always tended to keep its head clear and calm, with eyes fixed on the actual interest, the average practical and attainable. Not so in the Greek Orient. With the triumph of the Christian religion the gods of Hellas fell from their rotten pedestals. But they were never the governing element, the *principe générateur* of the Greek life. That was the individual reflective mind, eternally busy with the reasons of things, seeking the why and the how and the wherefore, not for any definite purpose, but because this restless research was its life, its delight; because at bottom it was highly idealistic and despised the outer and visible world as an immense phenomenon, a proper and commensurate subject for the frightful acidity of its criticism.

It is the metaphysical trend and spirit of these *opiniosissimi homines* of Greece which begat the great heresies of Arius, Macedonius, Nestorius and Eutyches—all Greeks. They even partially conquered in their defeat, for they compelled, to some extent, a philosophical refutation of their own vagaries; they helped Plato, and later Aristotle, to their high seats in Christian schools. With sure instinct the earliest Christian historians of heresies set down among them certain phases of Greek philosophy. *"Quid Academiæ et Ecclesiæ!"* cries Tertullian in his book on Prescription, as though he smelled the battle from afar.

In the intense passion of the Arian and Christological discussions the highest Greek gift, metaphysics, and the finest Greek training, dialectics, came to the front. In every city of the Greek world the most abstruse and fine-drawn reasoning was indulged in habitually by all classes. The heresy of Arius had surely its obscure origins among those third century philosophers of Antioch who gave to that school its grammatico-literal and rationalizing trend. He appeared at Nicæa in the company of pagan philosophers, and when defeated carried his cause at once before the sailors and millers and wandering merchants along the sea-front at Alexandria. And for two centuries the shopkeepers and shoemakers of Constantinople and Alexandria would rather chop logic than attend to their customers. For the victories of the mind the burdens of the State were neglected or forgotten, or rather a metaphysical habit of thought was carried into the council chamber, to prevail therein very often to the detriment

of the commonwealth. The great officers of the State were too often doubled with theologians. The Emperor himself took on gradually the character of an apostolic power, with God-given authority to impose himself upon the churches, formulate creeds, decide the knottiest points of divinity, make and unmake bishops great and small, and generally to become, in all things, a visible providence of God on earth.[10] This is what the Eastern world acquired by losing its Roman Emperors and gaining a succession imbued with the spirit of Hellenic thought and accustomed to the exercise of despotic power in a city that had no old and stormy republican traditions, being no more than the high golden seat of imperial authority from its foundation. Were it not for the magnificent resistance of Old Rome in her Leos and her Gregorys, the Oriental bishops would have allowed the cause of Christianity to become identified with the Cæsaropapism of the Emperors.

If we add to the loss or absence of desirable Roman qualities on the part of these great governors of imperial society, and the acquisition of undesirable Greek qualities, certain influences of the Orient, we shall, perhaps, better understand the situation in which Justinian found himself. It was noted very early that in contact with the Orient the extremely supple and impressionable Greek genius suffered morally. It lost its old Dorian or Argive independence, and, stooping to conquer, took on the outward marks of servitude while dwelling internally in its own free illimitable world of opinion and criticism. Long wars, commerce, travel, especially prolonged sojourns in corrupting Persia, had habituated the Eastern Greeks to political absolutism. Since Alexander the habits of servile subjection of their own conquered populations of Syria and Egypt were influential in this direction. The Roman Emperors from Diocletian on were themselves caught by the externals of the Great King's court, and seem to have transferred much of its ceremonial to their own. The presence in Constantinople of a great multitude of miscellaneous Orientals and the exaggeration of style and rhetoric peculiar to this, as to all other times of decadence, added strength to these influences.

II.

The great problem that faced Justinian on his accession was the *very character and limits* of the Roman State for the future. Were the encroachments of one hundred years, the extinction of the Imperium in the West, to be finally condoned to those victorious Germans who in the last century had absorbed the political control of

[10]Cf. Rambaud, "L'Empereur Byzantin," "Revue des Deux Mondes." 1891.

Italy, Gaul, Africa, Spain, Sicily? Or should an effort be made to reëstablish again an *orbis terrarum*, the ancient world-wide cycle of imperial authority? Should Carthage, Milan, Ravenna, Trier, Rome itself, be forever renounced, or must one last struggle be made to win back the Cradle of the Empire and the scene of its first conquests? Every possible argument pointed in an affirmative sense—the *raison d'Etat*, the religious considerations and influences, the demands of commerce and industry, the incredibly strong passion of sentiment evoked by the memories and glory of Old Rome. In the heart of Justinian burned the feelings of a Cæsar and a Crusader, a great trader and carrier of the Royal City and a Hellene scandal-stricken at the overflow of barbarism and "Medism" that was fouling all the fair and sweet uses of life. In the person of Belisarius he found a great general, one of the most intelligent and resourceful men who ever led troops into action. He found also for Belisarius a secretary, Procopius, who has left us a brilliant record of the great campaigns by which the ancient lands of the Empire were won back. For twenty-five years the world of the Mediterranean resounded with the din of universal war. Around the whole periphery of empire went on the work of preparation, a thousand phases of mortal conflict, a thousand sieges, truces and bloody battles. Belisarius broke the short-lived and fanatic Vandal power in 531, and Carthage, so dearly bought with Roman blood, was again a Roman city. Justinian lived to see the heroic resistance of the Ostrogoths made vain, after the death of their great King, by the total subjugation of Italy and its re-incorporation with the Empire. In the meantime the great corn granary of the Empire, Sicily, was won back, and the constant fear of famine that hung over Constantinople and the army disappeared. Scarcely had he relief in Africa or Italy when the Emperor moved his troops to the plains of Mesopotamia or even to the rocky fastnesses of Colchis, the modern Georgia, chastening at once the proud Mede and the wild, fierce shepherds of inaccessible hills. With the exception of the Persian campaigns, these wars ended successfully for the Roman State. One last outpouring of Teutons—the long advancing Lombards—wrenched away Northern Italy from the immediate successor of Justinian and interposed a hopeless barrier against any attempts to reconquer Austria, Switzerland and Bavaria. But Central and Southern Italy were saved. A prætorian perfect was set over Northern Africa; Sardinia and Corsica were once more integrant portions of the great Mediterranean State. A prætor again governed in Sicily as in the days of Cicero. From the inaccessible marshes of Ravenna an exarch or patrician ruled the remnants of the Roman name in the original home of that race. Even in Spain Justinian recovered a footing, and several cities

of the coast recognized again the authority that had so long civilized the Iberian peninsula.

Doubtless it was owing to the frightful exigencies of the Persian wars that Northern Europe swept finally out of the immediate vision of the Emperor. The men, ships, moneys and efforts of all kinds that it took to carry on these long and costly and unsatisfactory campaigns against the Persian could well have availed to reunite the lost lands of the North and to make the Rhine and the Danube again Roman rivers. The interest in the island of Britain grew so faint that it appears in Procopius only as the home of innumerable spirits, a vast cemetery of ghosts ferried over nightly from Gaul by terrified mariners who are chosen in turn and compelled by supernatural force.[11]

The Frank went on absorbing at his leisure the Rhineland, Switzerland, Bavaria, Southern Gaul, and threatened to sweep Spain and Northern Italy into his State.[12] Indeed, out of the fragments that escaped Justinian and Belisarius the greatest of the Frankish race, the mighty Karl, would one day resurrect the Roman Empire in the West. If Justinian did not recover all the Western Empire, at least he brought to an end the Germanic invasions by exterminating Vandal and Ostrogoth and reëstablishing in the West some formal and visible image of the old Roman power and charm. Henceforth Thuringians, Burgundians, Alemans, Visigoths, Suevi, Alans, the whole Golden Horde of tribes that first broke down the bounds of the Empire, tend to disappear, submerged in the growing Frankish unity. The one unfortunate race that came last—the Lombards—was destined to be utterly broken up between the three great Western powers of the two succeeding centuries, the children of Pepin Heristal, the Byzantine exarchs of Italy, and the bishops of Rome. Could Justinian have kept the line of the Danube free and secure, the course of mediæval history would surely have been changed. This was the original weak spot of the Empire, and had always been recognized as such. Trajan tried to romanize the lands just across it—the ancient Dacia—but his successor, Marcus Aurelius, had to withdraw. An inexhaustible world of miscellaneous barbarians—an *officina gentium*—was at the back of every frequent rebellion, and their warriors were like the leaves of the summer forest. Here, too, was the fateful margin of empire along which broke eventually the last surges of every profound social or economic disturbance of the far Orient, flinging across the great river in wild disorder Hun and Slav and Avar and Gepid and Bulgar. The first

[11]Nothing could illustrate more forcibly the thoroughness of the decadence of the old Roman power in the West than the presence in Procopius of this curious survival of old Druidic lore. Cf. Edouard Schuré, "Les Grandes Légendes de France." Paris, 1892, p. 154.

[12]Gasquet, "L'Empire Byzantin et la Monarchie franque." Paris, 1888. Lecoy de la Marche, "La Fondation da la France au V. et VI. siècles." Paris, 1893.

encroachments on Roman life and security culminated, after a century of warfare, in the ever memorable campaigns and retreats of Attila. And when the Empire of the mighty Hun fell apart at his death the Germans, Slavs, Bulgars, and other non-Hunnic tribes whom he had governed from his Hungarian village, took up each its own bandit life and divided with the Hunnic tribes the wild joys of annual incursions into those distracted provinces that are now the peaceful kingdoms of the Balkans and Greece, but were then Illyricum, Moesia, Thrace, Thessaly, Macedonia, Epirus. The Avars and the Huns, remnants perhaps of the horde of Attila, were the most dreaded in the time of Justinian. But they only alternated with the Slavs, to whom they gave way within a century, so endless was the supply of this new family of barbarism. These latter were tall, strong, blond, with ruddy hair, living in rude hovels and on the coarsest grain, fiercely intolerant of any rule but that of the father of the family, jealous and avaricious, faithless like all barbarians, yet child-like in their admiration for power and grandeur. They harassed yearly the whole immense peninsula of the Balkans. They climbed its peaks, threaded its valleys, swam its rivers, a visitation of human locusts. The regular armies of Justinian were of no avail, for these multitudes fought only in ambuscade, a style of warfare peculiarly fitting to the Balkans, which are like the "Bad Lands" of Dakota on an immense scale. They shot from invisible perches poisoned arrows at the Romans, and at close quarters were dread opponents by reason of their short and heavy battle-axes. It was in vain that line within line of fortifications were built, that in isolated spots the watch-towers and forts were multiplied and perfected, that every ford and pass and cross-road had its sentry boxes and castles. The enemy had been filtering in from the time of Constantine,[13] and was already no small element of the native population. So, as German had called to German across the Rhine, Slav called to Slav across the Danube; the Romans were caught between the hammer and the anvil, between the barbarian within and his brother from without. Nevertheless it was not without a struggle that filled four centuries more that Constantinople let go her mountain bulwark. Every river ran red, and every hillside was drenched with blood, in that memorable contest, in which she sometimes saw from the walls of the Royal City the plains of Thrace one smoking ruin, and again all but cut off, root and branch, her Slavonic and Bulgarian enemies.[14]

[13] O. Seeck, "Geschichte des Untergangs der antiken Welt," vol. I. Berlin, 1897. Part II., c. 6. "Die Barbaren im Reich," pp. 391-548.

[14] The influence of Constantinople in the later Slavonic world is incontestable. Beside the "Chronicle of Nestor" (French translation by L. Leger. Paris, 1884), cf. Gaster, "Græco-Sclavonic," London, 1887; Rambaud, "La Russie Epique," Paris, 1876; Krek, "Einleitung in die Slavische Literatur-geschichte," Graz, 1887, pp. 451-473, and the pro-Byzantine work of Lamansky (in Russian) "On the Historical Study of the Græco-Sclavonic World," St. Petersburg, 1871.

Doubtless the heart of Justinian was sore pressed at his impotency against the swarming Slavs and Avars. He loved his Illyrian home and built on the site of his native village a city, Justiniana Prima (near Sofia), which he fondly hoped would be a new Byzantium in the Balkans. With a foreconscious eye he made it a bishopric, even a patriarchate, and ordered for it honors second only to those of the most ancient sees of the Christian world. This act was productive of grave consequences in later times that fall beyond our present ken.[15]

The long wars of Justinian with Persia were otherwise important. Here it was a death struggle between Persia striving to reach the sea and Constantinople struggling to keep her back. These wars lasted more or less continuously from 528 to 562, and sometimes coincided with the greatest expeditions in the West. From time to time a peace was concluded or a truce—the peaces were really only truces. The usual result was the payment of a heavy tribute on the part of the Emperor, amounting at times to as much as a million dollars, not to speak of the smaller sums paid by the cities of Mesopotamia or Syria, and the incalculable treasures carried off in each of these campaigns. If the Persian resented new fortifications in the vicinity of the Euphrates, war was declared. If the Saracen Sheikhs who stood with the Romans fell into a dispute with their brethren who served Persia over a desert sheep-walk, it was settled by a long war between the Romans and the Persians. Endless sieges of fortified cities, heavy ransoms from pillage and burning, extraordinary single combats, marching and counter-marching across Syria and Mesopotamia, fill the pages of the historians. The local Jews and Samaritans, yet numerous and powerful, were no small source of weakness to the Romans. So, too, were the ugly heresies of the Monophysites and Nestorians, with all the hatreds and heart burnings they occasioned against Constantinople, the protectress of the orthodox faith of Chalcedon, a general council almost universally misunderstood and equally hated in Syria and Egypt. In 532, for example, Justinian purchased peace for eleven thousand Roman pounds of gold (about two and a half millions of dollars). He was then in the throes of the Vandal war in Africa and on the point of the expeditions against the Moors and to recover Sicily. When Belisarius was in the very heart of the Gothic War in Italy, Chosroes again broke the peace, solicited by Witigis, the head of the Gothic forces, and joined by many dissatisfied Armenians, who considered themselves oppressed by the Romans—perhaps, too, embittered by the persecution directed against the Monophysites.

In their own way these wars are of value for the history of military

[15]Duchesne, "Les Eglises Séparées." Paris, 1897.

engineering. Great and ancient cities fall before the engineers of Persia. Antioch, the Queen of the East, for the second time saw a Persian King within her walls. Chrosroes even reached the shores of the Mediterranean, gazed on the great Midland Sea, bathed in its blue waters, and on its shores offered to the sun the sacrifice of a fire-worshipper. He had strong hopes of reaching and conquering Jerusalem and of bringing all Syria under his yoke, but desisted therefrom. Internal disorders and the plague seem to have held him back. The last phase of these Persian wars was unrolled at the extremity of the Black Sea, among the Lazi, in old Greek Colchis, the Land of the Golden Fleece, now Mingrelia and Georgia. The people were Christians and under an uncertain Roman protectorate. But they abutted on an unruly portion of the Persian Empire, and so were a thorn in the side of Chosroes. Moreover, he had long desired a footing on the Black Sea, whence he could create a navy that would place Constantinople at his mercy and permit him to come into easy contact with those Huns and Slavs and Avars who from the mouths of the Danube and the plains of Bessarabia and Southern Russia were harassing the Royal City. Hence the great importance of the long and weary struggle for the wild and barren hills of the Caucasian seashore. They were doubly important, because these narrow passes could keep back or let in the trans-Caucasian Scythians and create a new source of ills for a state groaning already under a complication of them. In the end the Persian was shut out, chiefly because the population was Christian and unsympathetic to him, but not without a war of seven years' duration, filled with romantic episodes and revealing at once all the weaknesses and also the strong points of the Roman military system. The victory, as usual, cost a notable sum of money. Justinian agreed to pay about one hundred thousand dollars yearly for fifty years, of which nearly a million dollars had to be paid down at once. Nevertheless, he kept the Persians from becoming a naval power and from undertaking the anti-Christian propaganda that a century later fell to the yet despised Arabs and Saracens who were serving in both armies, unconscious that on the great dial of time their hour was drawing nigh.

For the thirty-eight and odd years of his reign the Emperor was never free from care as to the existence and limits of the State. It was no ordinary merit to have provided for the defense of the common weal in all that time, to have recovered a great part of what his predecessors had lost, to have restored the prestige of the Empire over against Frank and Ostrogoth, to have kept Persia in her ancient limits, and to have saved the Royal City from the fate of Old Rome, which had fallen before the first onslaught of Alaric. No doubt he

had able generals, Belisarius, Bessas, John the Armenian, Dagisthæus, Wilgang and others. It was an age of mechanical inventions and engineering skill, the result of good studies among the ancient books and also of new needs and experiences.[16] The peculiar character of the barbarian wars and the multitude of old populous cities through the Roman Orient gave opportunity for the development of fortifications. By this means chiefly, it would seem, the Emperor hoped to withstand the attacks of his enemies.

III.

The armies of Justinian were recruited on pretty much the same principle as those of his predecessors. Since Diocletian and Constantine, conquered barbarians had become the mercenaries of the Empire and received regularly as wages the gold which they had formerly extorted by the irregular and uncertain methods of invasion and plunder. Isauria in all its inaccessible strongholds became a *pepinière* of soldiers for the Empire just as soon as it had been demonstrated to these untameable hill-folk that Constantinople would no longer tolerate their impudent independence. The Catholic "Little Goths" of Thrace were good for many a recruit.

The disbanded and chiefless Heruli, ousted from Italy by Theodoric, were at the disposition of the Emperor. Sometimes the barbarians came in as foederati, or as "coloni," half-soldiers, half-farmers. Sometimes they rose to the highest offices by bravery and intelligence, like a Dagisthæus, a John, a Wilgang, a Guiscard, five hundred years ahead of that other Guiscard who was to beard in Constantinople itself the successor of Justinian. It was a heyday for all the barbarian adventurers of the world. Never since the palmy days of Crassus and Cæsar and Antony and Germanicus was there war at once so grievous and widespread, so varied in its fields of battle and claiming so much endurance, ingenuity and industry. Then was in demand all that the art of sieges had gained since the Homeric pirates sat down before some lone Greek trader on his isolated perch in the Ægean. If Shakespeare's Welsh Captain could read of the famous sieges of Daras and Edessa, his soul would go up in flame for joy at these wars carried on with all the science of a dozen Cæsars. Trench and counter-trench, wall and parapet, ditch and mine, tower and rampart, battering ram and beam and wedge—a hundred industries were kept going to lay low the huge

[16]In the "Variæ" of Cassiodorus are found many curious contemporary traces of the survival of the ancient skill in engineering and architecture. Cf. the formula (VII., 6) for the appointment of a Count of the Aqueducts, and (VII., 15) for the appointment of an "Architectus operum publicorum." "Let him consult the works of the ancients, but he will find more in this city (Rome) than in his books." The "Letters of Cassiodorus" are translated by Thomas Hodgkin. London, 1886.

fortifications of monolith and baked brick that dotted the land of Eastern Syria and Mesopotamia. Indeed, it was by his enormous system of fortifications that the great Emperor assured the restored peace of his domains.

It is true, as Montesquieu has said, that "France was never so weak as when every village was fortified." Yet under the circumstances this was the only immediate remedy against countless enemies from without and within ceaselessly plotting the ruin of the venerable old State. The best national defenses are those which we can most easily set up and most strongly defend, not what the theorist or philosopher of war can suggest. From Belgrade to the Black Sea, from the Save to the Danube, citadels with garrisons and colonies were located and provided with weapons of defense and attack. In Greece, Macedonia, Thrace, Thessaly over 600 forts were established for observation and resistance. Many of them, perhaps, were such watch-towers and lonely barracks as we yet see in the Roman Campagna, whither the shepherd and his herd could turn for a momentary refuge from marauders.

All the scum of the Northeastern world was floating loosely over the plains of Southern Russia, faintly held back by the Greek cities of the Crimea. The peninsula of Greece was particularly open; the unwarlike character of its thin population was patent since Alaric had burned and pillaged his way across it in all directions early in the fifth century. Since then its woes are best described by dropping a black pall across the annals of one hundred years.

"The centre of earth's noblest ring"

was a howling desert, save for a few cities in which, perhaps, the old Greek blood was propagated, and some spark of the philosophic mind nursed against a better day.[17] The pass of Thermopylæ was again fortified and garrisoned. The Isthmus of Corinth was strengthened as a buffer for the wild Peloponnesus, half-heathen as it still was in its remotest valleys and hillsides.

The long wall of Thrace that protected the kitchen-garden suburbs of Constantinople was strengthened, not so well, however, that irregular bands of Huns, Avars and Slavs did not regularly break through and insult the holy majesty of the Empire with their barbarian taunts that mingled with the flames of costly churches and municipal buildings and with the cries of the dying and the out-

[17] If we go to look in modern Greece for pure and unmixed Hellênes, untainted by any drop of barbarian blood, that we assuredly shall not find. . . . The Greek nation, in short, has, like all other nations, been affected, and largely affected, by the law of adoption. . . . The Sclavonic occupation of a large part of Greece in the eighth and ninth centuries is an undoubted fact, and the Sclavonic element in the population of Peloponnesos may be traced down to the time of the Ottoman conquest." Freeman, "Mediæval and Modern Greece," op. cit., pp. 340-341.

raged. As we peruse these annals it is hard to keep back a tear and a shudder, and we comprehend the preternatural gravity that hangs about every coin and effigy of Justinian. To him it must have seemed as if the original sanctity of order, the rock basis of society, were tottering to its fall. Alas! he could not see that those flames which lit up the Propontis and the Isles of the Princes,[18] which fell across the site of ancient Troy and the original homes of Dorian and Ionian merchants, were not the awful illumination of a "Night of the Gods," but the dawn of our modern society.[19] In such pangs and throes does social man usually reach his highest place, his highest calling on this sad footstool of earth!

Though the quasi-extermination of Isauria by Anastasius gave peace on the mainland of Asia Minor, Justinian was obliged to protect that vast heart of the Empire, with all its superimposed and ancient civilizations, by great walls towered and flanked at intervals from the Crimea to Trebizond on the Persian frontier, a stretch of five hundred miles. The Iberian and Caspian Gates, those narrow sea margins and mountain throats that control the entry to the Black Sea from the steep ranges of Caucasus, had also to be fortified, or, rather, the strong hand of the Emperor must compel the rude mountain chiefs to render to him as well as to themselves this necessary duty. The very sources of the Euphrates, forever a dark and bloody line of battle, had to be secured against the feudal satraps of the Great King. In the Mesopotamian plain Amida, Constantine, Nisibis, holy Edessa, must rise up clad with impregnable armor and filled with warlike men. Restless, unsympathetic, proud, discontented, abused Armenia—the torture of Rome since the days of Mark Antony and still the plague of statesmen—must be fastened

[18] Schlumberger, "Les Iles des Princes." Paris, 1884.

[19] The first chief who fenced in the Palatine with a wall did not dream that his hill-fortress would become the head of the world. He did not dream that it would become the head of Italy or even of Latium. But the prince who fenced in the New Rome, the prince who bade Byzantium grow into Constantinople, did design that his younger Rome should fulfil the mission that had passed away from the elder Rome. He designed that it should fulfil it more thoroughly than Milan or Trier or Nikomêdia could fiulfil it. And his will has been carried out. He called into being a city which, while other cities have risen and fallen, has for fifteen hundred years, in whatever hands, remained the seat of imperial rule; a city which, as long as Europe and Asia, as long as sea and land keep their places, must remain the seat of imperial rule. The other capitals of Europe seem by her side things of yesterday, creations of accident. Some chance a few centuries back made them seats of government till some other chance may cease to make them seats of government. But the city of Constantine abides and must abide. Over and over again has the possession of that city prolonged the duration of powers which must otherwise have crumbled away. In the hands of Roman, Frank, Greek and Turk her imperial mission has never left her. The eternity of the elder Rome is an eternity of moral influence; the eternity of the younger Rome is the eternity of a city and fortress fixed on a spot which nature itself had destined to be the seat of the empire of two worlds. Freeman, "The Byzantine Empire" in "Historical Essays," III., series, 1892, p. 255. On the city of Constantinople besides the classic description of Hammer in his "Geschichte der Osmanen" there are for modern times the books of De Amicis, Grosvenor and Hutton; for the Middle Ages the "Esquisse topographique" of Dr. Mordtmann, Lille, 1892; for the early Middle Ages "Constantinopolis Christiana" (fol.) 1729, and Riant, "Exuiviæ Sacræ Christianæ," Génêve, 1877, 2 vols.

once more, however unwillingly, to the body of the Roman State.

In the whole Orient rose up one hope of victory, one sure refuge, the great Gibraltar of Daras. One hundred years had Rome toiled at that barrier against Persia. Only the incessant wars in Italy and the Mediterranean prevented Justinian from making it the capital of Roman power in the Orient. As it was, Daras was the chief thorn in the side of Persia, a living monumental insult pushed far into the lands that the Great King looked on as his hereditary domain, and an encouragement to all his own rebels as well as a promise to the thousands of unattached Saracens, the Bedouins of those grassy deserts, on whose surface we now look in vain for traces of the greatest fortress that Greek genius ever constructed.

Egypt, too, the land of the wheat-bearing and gold-producing Nile, needed the assurance of fortifications against the hordes of Ethiopia and Nubia and inner unexplored Africa, against the tribes of the Soudan, who from time immemorial, under many names, waged war against civilization on its oldest, richest and narrowest line of development.

Justinian never forgot the arts of diplomacy in the midst of all these warlike cares. He was always willing to pacify by tribute the various broken bands of Huns. This had been always one line of imperial policy, even in the palmy days of a Theodosius the Great. Much was always hoped from the internal discords of the barbarians, who often dissipated their strength in orgies and self-indulgence. One tribe was played off against the other by arousing avarice. The Goths, for instance, hated the Franks and the Alemans, so they were willing to exterminate 75,000 of the latter, who might have helped them to cast out thoroughly the Roman power. The Emperor encouraged the King of Abyssinia against the King of the Homerites in Southern Arabia, and made thereby a useful Christian friend, while he broke up an anti-Christian Jewish power. He took in as a body of auxiliary troops the Heruli of Italy, so brutal and stupid that nobody would have them as neighbors. He gave the Crimea to three thousand shepherd Goths and cultivated the principal men among the Tzani, the Armenians, the Lazi of Colchis. Chosroes could say in 539 that soon the whole world would not contain Justinian, so happy seemed his fortunes about that date. Yet he could also taste the cup of despair, for in 558 he was obliged to witness a small body of wild Huns come up to the very gates of the Royal City, an advance guard of other hordes that were pillaging Thrace and Greece. The aged Belisarius could find only three hundred reliable soldiers in a city of one million inhabitants; yet with them he scattered these Huns and saved the city.

The old historian Agathias tells us that there should then have been in the army six hundred and fifty-five thousand fighting men, but it had dwindled down to one hundred and fifty thousand. "And of these some were in Italy, others in Africa, others in Spain, others in Colchis, others at Alexandria and in the Thebaid, a few on the Persian frontier."

It is to this decay of the army, caused perhaps by jealousy of its immortal leader and by female intrigue, that the same judicious historian, a contemporary and a man of culture, attributes the growing ills of the Roman State. His thoughtful phrase is worth listening to; soon this current of philosophic observation will cease and commonplace chronicling take its place in the seventh and eighth centuries of the Byzantine Empire.

"When the Emperor conquered all Italy and Lybia and waged successfully those mighty wars, and of the Princes who reigned at Constantinople was the first to show himself an absolute sovereign in fact as well as in name—after these things had been acquired by him in his youth and vigor, and when he entered on the last stages of life, he seemed to be weary of labors, and preferred to create discord among his foes or to mollify them with gifts, and so keep off their hostilities, instead of trusting his own forces and shrinking from no danger. He consequently allowed the troops to decline, because he expected that he would not require their services. And those who were second in authority to himself, on whom it was incumbent to collect the taxes and supply the army with necessary provisions, were affected with the same indifference and either openly kept back the rations altogether or paid them long after they were due; and when the debt was paid at last, persons skilled in the rascally science of arithmetic demanded back from the soldiers what had been given them. It was their privilege to bring various charges against the soldiers and deprive them of their food. Thus the army was neglected and the soldiers, pressed by hunger, left their profession to embrace other modes of life."

IV.

The very religious mind of Justinian could not but be much concerned with the social conditions and problems of his time. His legislation bears the impress of this preoccupation—it is highly moral throughout and constantly seeks a concord on ethical and religious principles. Thus, to go through his code haphazard we find him concerned about the building of churches and their good order and tranquillity. He is said to have built twenty-five in Constantinople alone and to have chosen for them the most favorable

sites in public squares, by the sea, in groves, on eminences where often great engineering skill was demanded. The rarest woods and the costliest marbles were employed, and multitudes of laborers given the means of life. They were usually paid every evening with fresh-coined money as a tribute to religion. He built and endowed many nunneries, hospitals and monasteries, notably in the Holy Land, where he also provided wells and stations for pilgrims. Bridges, aqueducts, baths, theatres went up constantly; for building he was a second Hadrian. And all this had a social side—the employment of vast numbers of men, the encouragement of the fine arts, great and little. He is concerned about institutions of charity of every kind, and in their interest makes his own the old and favorable laws of his predecessors. In his day every sorrow was relieved in Constantinople. The aged, the crippled, the blind, the helpless, the orphans, the poor had each their own peculiar shelter, managed by thousands of good men and women who devoted themselves gratuitously to these tasks.[20] The slave and the debtor had their rights of asylum acknowledged in the churches and regulated according to the demands of proper police order. The right of freeing the slaves was recognized especially in bishops and priests, and the latter were given the power to control the "defenders of the city"—a kind of popular tribunes, whose duty it was to supervise the proper administration of justice. He undertook to abolish gambling, claiming, curiously enough, that he had the same right to do that as to carry on war and regulate religion. Blasphemy and perjury and the greater social crimes and sins were visited with specially heavy sanctions, though we may doubt if they often passed beyond the written threat.

He legislated humanely for the rescue of abandoned children and for the redemption of those numerous captives whom the barbarians daily swept away from the soil of the Empire. No female could longer be compelled to appear in a theatrical performance, even if she were a slave, even if she had signed a contract to do so, being a free woman. The bishop of each city was authorized to carry out this law. An actress might henceforth marry any member of society, even a Senator. He was personally interested in the thousands of poor girls who came yearly to the Royal City and were often the prey of designing persons who had traveled through the provinces "enticing young girls by promising them shoes and clothes."

In the last century it was a custom to offset such creditable details

[20] Bulteau, "Essaide l'histoire monastique de l'Orient," Paris, 1680. The late work of the Abbé Morin, "Les Moines de Constantinople," Paris, 1897, and the study of Dom Besse, very rich in details, "Les Moines d'Orient antérieurs au Concile de Chalcédoine," Paris, 1900, permit the student to obtain a complete conspectus of the monastic history of the Orient.

by reference to the terrible pages of the Anecdota or "Secret History" of Procopius. And Gibbon has not failed to expend on them some of his most salacious rhetoric and to violate, for their sake, his usual stern principles of doubt and cynicism.[21] Perhaps I cannot do better than cite the very recent judgment of a special student of Byzantine history:

"The delicacy or affectation of the present age would refuse to admit the authority and example of Gibbon as a sufficient reason for rehearsing the licentious vagaries attributed to Theodora in the indecent pages of an audacious and libelous pamphlet. If the words and acts which the writer attributes to Theodora were drawn, as probably is the case, from real life, from the green rooms of Antioch or the bagnios of Byzantium, it can only be remarked that the morals of those cities in the sixth century did not differ very much from the morals of Paris, Vienna, Naples or London at the present day."[22]

Still milder and more favorable is the judgment of Krause as to the morality of the city of Constantinople, even at a later date, when the first fervor of Christianity had cooled and the city had suffered from the immoral contact of Islam and had become almost the sink of the Orient. From its foundation in 330 to its fall in 1453 Constantinople was always a Christian city, sometimes fiercely and violently

[21]In a few vigorous phrases Edward Freeman has laid bare a structural weakness of Gibbon: "With all his (Gibbon's) wonderful power of grouping and condensation, which is nowhere more strongly shown than in his Byzantine chapters, with all his vivid description and his still more effective art of insinuation, his is certainly not the style of writing to excite respect for the persons or period of which he is treating or to draw many to a more minute study of them. His matchless faculty of sarcasm and depreciation is too constantly kept at work; he is too fond of anecdotes showing the weak or ludicrous side of any age or person; he is incapable of enthusiastic admiration for any thing or person. Almost any history treated in this manner would leave the contemptible side uppermost in the reader's imagination; we cannot conceive Gibbon tracing the course of the Roman Republic with the affection of Arnold, or defending either democracy or oligarchy with the ardent championship of Grote or Mitford." "Historical Essays," 3d series (2d ed.), 1892, pp. 238-239. This recalls what Morison said of Gibbon—that "his cheek rarely flushes in enthusiasm for a good cause." Coleridge's well-known judgment in his "Table Talk" may be worthy of mention, viz., "that he did not remember a single philosophical attempt made throughout the work to fathom the ultimate causes of the decline and fall of the Empire." In an otherwise sympathetic study Augustine Birrell has recorded an equally severe judgment on the historical method and principles of Gibbon: "The tone he thought fit to adopt towards Christianity was, quite apart from all particular considerations, a mistaken one. No man is big enough to speak slightingly of the construction his fellow-men have put upon the Infinite. And conduct which in a philosopher is ill-judged is in an historian ridiculous. . . . Gibbon's love of the unseemly may also be deprecated. His is not the boisterous impropriety which may sometimes be observed staggering across the pages of Mr. Carlyle, but the more offensive variety which is heard sniggering in the notes." "Res Judicatæ." New York, 1897, pp. 79-80.

[22]Bury, *op. cit.*, II., p. 61. On Procopius in general; cf. Dahn, "Prokopios von Cæsarea," Berlin, 1865; Gutschmid, "Die byzantinischen Historiker" in the "Grenzboten," 1863, I., 344; Ranke, "Weltgeschichte," IV., 2 (1883), 285-312; Bury, "History of Later Roman Empire," (1889), I., 355-364. Ranke is of opinion that the Secret History contains genuine material from the hand of Procopius, as, for instance, the adultery of Antonina, wife of Belisarius. But such materials have been interwoven and overlaid with other assertions not due originally to Procopius, but to jealous and disappointed persons, especially those affected by the stern conduct of Justinian in the Niké sedition (532).

so, nevertheless an essentially Christian foundation. The social life, therefore, of the city, and the Empire that it gave the tone to, could not but be of a higher grade than the pagan life had to show, whether we look at the condition of woman, the poor, the slave and the child, those four usual factors that condition the moral life of all ancient society. All the betterments of Christianity were here available for the slave, and they were many and great. Numberless convents opened their doors to women and proclaimed in them the dignity and independence of human nature in the only way possible in antiquity. The diaconal service of the numberless churches was largely in their hands; it was they who cared for the orphan and the poor and the aged. In the schools they conducted the maidens of the city were taught to read the great classics of the Greek fatherland in a way that did not force them to blush for the first principles of decency. The letters of a Basil and a Chrysostom, the poems of a Gregory of Nazianzum, were written in a language scarcely less pure and elegant than the best masterpieces of Attica.[23]

The frequent sermons of renowned orators in the churches and the daily conversation of men and women in the best rank and station, particular in language and manner as the Greeks always were, offered a superior culture. Though they had lost their rude liberties, they had not lost their fine ear for verbal music, their keen and disputatious minds. The society of Constantinople was at all times famed for the admirably bred women it could show. Pulcheria, Athenais, Eudoxia, were women of the most varied gifts, and they actually governed the governors of the world by the use of these gifts. The letters of St. John Chrysostom to the Deaconess Olympias, the story of his own mother, of the women of the great Cappadocian family of saints and theologians, reveal a fine and original culture penetrated with religion, but also enthusiastic for all that is holy and permanently fair, worthy and sweet in life. Whence, indeed, could come the strong men who so long held the Royal City above the waves of barbarism and disrupting war and internal disorder but from a truly great race of women? When Constantinople was founded a place was made for the consecrated virgins of the Christian Church. And forever after they held that place of honor so worthily that the tongue of slander has scarcely wagged against them. For over eleven centuries the City stood in the seething

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[23]Withal mediæval society was deeply indebted to the Empire for the materials and traditions with which it began its career. Cunningham, "The Economic Debt to Ancient Rome" in "Western Civilization in Its Economic Aspects." Cambridge University Press, 1900, pp. 5-9; cf. also for the mediæval influence of Constantinople on the West. Döllinger, "Einfluss der griechischen Kultur auf die abendländesche Welt im Mittelalter." Akad. Vorträge, vol. I., Munich, 1890, pp. 162-186; Burkhardt's "Renaissance," Voigt, "Die Wiederbelebung des Classischen Alterthums," 2d ed., 1881, and Bikélas, "Les Grecs au Moyen Age," in "La Grèce Byzantine et Moderne." Paris, 1893, pp. 3-88.

waters of secular iniquity, human weakness, Oriental depravity, Moslem immorality and the miscellaneous filth and sinfulness of the corrupt East. Yet she never ceased to fill these religious houses of men and women, especially the latter, and never ceased to behold in them models of the highest spiritual life on earth. We know how to praise the Theophanos, the Marias and the Anna Komnenas of the Greek Middle Ages. But who shall say how many souls of noble women went their way silently along the ancient cloisters by the Bosphorus, wanting indeed in fame, but not wanting in a multitudinous rich service to every need of humanity? The Greek sinned tragically against the duty of Christian unity, but he never lost the original Christian respect for the way of sacrifice and perfection.

V.

The ancient life about the Mediterranean was governed by principles and manners unknown or unappreciated by us.[24] The warm sun and the abundant waters of inexpressibly delicate hues, the rich and varied vegetation, the cool and calming winds, render many of these lands the most delightful of the world. Life there has always been an out-of-door life; all the higher forms of social amusement have been affected by the climate and the geography. It was so in Old Rome, it is so in all the lands of Italy, Spain and Southern France to this day. The peasant dances on the public square; the strolling player with his bear or his marionette sets up his tent near by. The harvest festival, the church fête, the relics of old pagan superstitions baptized into harmlessness by innumerable centuries of toleration—all these are lived out in the open air under a cloudless sky, amid balmy breezes laden with the scents of olive and vine, fig and orange, and the most aromatic shrubberies. As these ancient peoples moved up in the forms of government their political life was all out of doors—the speaking, the voting, the mighty contests of eloquence. And when the Greek cities lost to Rome their national isonomy they could still hire some famous sophist or rhetorician, like Dio Chrysostom, to keep up on the "ágora" some faint echo or image of their adored old life.[25]

So it was that when Constantinople was built the life of the city soon centred in its great hippodrome. Since Homer described the

[24]Lenormant, "La Grande Grèce." Paris, 1881-1884, 3 vols.

[25]The municipal and domestic life of the Constantinople of Justinian is illustrated somewhat freely in Marrast, "La Vie Byzantine au VI. Siècle." Paris, 1881. For the following centuries cf. Krause, "Die Byzantiner des Mittelalters," Halle, 1869; Schlumberger, "La Sigillographie Byzantine," Paris, 1884. The work of Amedée Thierry on St. John Chrysostom contains admirable sketches of early Byzantine life that are to be supplemented now by the indispensable volume of Aimé Puech, "St. Jean Chrysostome et les Mœurs de son Siècle." Paris, 1890.

races by the much-resounding sea the peoples of the Mediterranean have been inexplicably fond of horse racing, chariot and hurdle racing. If George Moore had lived among them he would have produced a superior Esther Waters. General Lew Wallace has left a classic page or two descriptive of the races at Antioch that will perhaps live while our tongue is spoken. But no one has yet caught the spirit of that great hippodrome by the Golden Horn. It came fresh from Old Rome, with all the prestige of imperial splendor and fondness. In that mighty circus whose ruins yet appall us at Rome an imperial people had ruled, had felt almost as vastly as a god, had raged, thundered, compelled, made to die and to live, had experienced an oceanic fulness of life, a glory of self-adulation such as might befit the highest and whitest Alp or the solemn depths of the Hercynian forest. And so, when at Constantinople the Emperor sat bediademmed in his chosen seat, the autocrator, the pantocrator, the Basileus, the golden King of Kings, it seemed as if his were indeed an "eternal countenance, sacrosanct, holy, inviolable." In him that awful mob saw itself mirrored. Each one, according to his own passion or aspiration, saw the reach and the limit of his own possibilities.

Nothing affected more profoundly the society of Constantinople than the hippodrome or circus. The great multitude of men and women connected with this "peculiar institution" were divided from time immemorial into factions—once red, white, blue, green, from the color of the ribbons attached to the axles of the chariot wheels or to the ears of the horses. These were the symbols borrowed from Old Rome, and in the time of Justinian they had dwindled to two, the blues and the greens. The sympathy of the million inhabitants of the city was divided between them, but with the inconstancy of the mob. In the time of the great Emperor the Greens had become identified with opposition to the Council of Chalcedon, had become the Monophysite factor of the city. They had, moreover, attracted the hatred of the Empress Theodora. The blues were the favorites of the imperial family. The contentions of both were endless and very dangerous. They held open and contemptuous discourse with the Emperor during the races and clamored wildly for justice on their respective enemies. The stormiest scenes on the Pnyx, the fiercest contentions in the Forum, were child's play to the rocking passions of the great mob of blues and greens on some high day of festival. These colors eventually became the symbols of all discontent and rebellion. In 532 their violence reached its height in the sedition of Niké, whereby 30,000 souls perished in the circus and on the streets and a great and splendid part of the city was consumed by flames, including the great church of the Heavenly Wisdom or

Saint Sophia. Perhaps this uprising was the end of the genuine city-life of the ancients, some remnants of whose turbulent freedom had always lived on in Old Rome and then in Constantinople. With the awful butchery of those days the aristocracy of the City was broken under the iron heel of the cold-faced man who dwelt in the Brazen Palace. Neither priest nor noble ever again wielded the power they once held before this event, which may in some sense be said to mark the true beginning of Byzantine imperialism, being itself the last symbolic act of popular freedom. It is significant that the last vestiges of the free political life of Hellas were quenched in the City of Byzas by thousands of ugly and brutal Heruli whom a lucky Slav had attached to himself as so many great Danes or Molossi!

The fiscal policy of Justinian has been criticized as the weakest point of his government. In his time the Roman Empire consisted of sixty-four provinces and some nine hundred and thirty-five cities. It had every advantage of soil, climate and easy transportation. Egypt and Syria should have sufficed to support the imperial majesty with ease and dignity. The former alone contributed yearly to the support of Constantinople 260,000 quarters of wheat. The Emperor's predecessor, Anastasius, dying, left a treasure of some sixty-five million dollars. It is true that terrible plagues and earthquakes devastated the population and reduced its spirit and courage to a minimum. But they were still more disheartened by the excessive and odious taxes. An income tax on the poorest and most toilsome in the cities, known as the "gold of affliction," earned him a universal hatred. The peasants had to provide vast supplies of corn and transport it at their own expense to the imperial granaries, an intolerable burden that was increased by frequent requisitions of an extraordinary kind. The precious metals decreased in quantity partly through the enormous sums paid out annually in shameful and onerous tributes, partly through pillage and the stoppage of production, owing to endless war. Weapons, buildings, fortifications, alms, the movement of great armies and great stores of provisions consumed the enormous taxes. Heavy internal duties were laid, not only on arms, but on many objects of industry and manufacture, thus rendering any profitable export impossible. The manufactures of purple and silk were State monopolies. The value of copper money was arbitrarily raised one-seventh. The revenue was farmed out in many cases, and the venality of the collectors was incredible. Honors and dignities were put up for sale. The office of the magistrate became a trade, out of which the purchaser was justified in reimbursing himself for the cost. The rich were compelled to make their wills in the imperial favor if they wished to save anything for

their families; the property of Jews and heretics was mercilessly confiscated. With one voice the people execrated a certain John of Cappadocia, the imperial banker and Minister of Finance. For a while the Emperor bowed to the storm of indignation, but he could not do without the clear head and hard heart and stern principles of this man, and so recalled him to office. His example of avarice and cruelty was, of course, imitated all along the line of imperial officers and agents. On the other hand, economies that were unjust or unpopular or insufficient were introduced—the civil list of pensions was cut down, the city was no longer lit up at night, the public carriage of the mails was abandoned, the salaries of physicians reduced or extinguished, the quinquennial donative to the soldiers withdrawn. Though the unfortunate subjects of Justinian suffered untold woes in Greece and Thrace and Syria from invasions and the constant movement of large bodies of soldiery, their taxes were never remitted, hence a multitude of abandoned farms and estates. In a word, Justinian "lived with the reputation of hidden treasures and bequeathed to posterity the payment of his debts." His reign is responsible for the economic exhaustion of the Roman Orient that was prolonged long enough to permit of the triumph of Islam in the next century—one of the most solemn proofs of the intimate connection of social conditions with religious change and revolution.

Justinian had one passion, the imperial passion par excellence, the passion of architecture.[26] He delighted in great works of engineering, in prodigies of mechanical invention. We have seen that he built many churches, and rich ones, in the Royal City. He eclipsed them all by his building of Saint Sophia, little thinking that he was raising it for the wretched worship of the successors of an Arab camel driver. For him Anthemius of Tralles and Isidore of Miletum raised in the air this new thing in architecture, bold, light, rich, vast, solemn and open. Ten thousand men worked six years at it. They were paid every day at sunset with new-minted pieces

[26]The art and architecture of ancient Constantinople have never ceased to fascinate a multitude of writers since Ducange. Indeed, the series begins much earlier. Procopius added to his fame as a writer, if not to his character for honesty, by his "De Edificiis" (Bonn ed., 1838). His contemporary, the Guardsman Paul (Silentiarius), described in minute detail the glories of Sancta Sophia, and a mass of curious information that drifted down the centuries lies stored up in the book of the antiquarian Codinus, "De Edificiis" (Migne PG., vols. 157 and 158). The monumental works of Salzenberg and Labarte have found worthy followers and critics in Pulgher, Paspatis, Unger, Bayet, Ferguson, Müntz, Springer, Kondakoff and Kraus. Cf. Choisy, "L'Art de bâtir chez les Byzantins," Paris, 1884; Bayet, "L'Art Byzantin," Paris, 1883, and Mrs. J. B. Bury in "History of Lower Roman Empire," II., 40-54. For the very abundant literature of this subject cf. Kraus, "Geschichte der christlichen Kunst." Berlin, 1898-1899. 2 vols. Its profound influence on the symbolism of the Middle Ages may be traced partly through "The Painter's Book of Mount Athos" in Didron's "Manuel d'Iconographie Grecque et Chrétienne," Paris, 1845. Cf. Edward Freshfield on "Byzantine Churches" in "Archæologia," vol. 44, pp. 451-462.

of silver. And when it was done the Emperor, standing amid its virgin and shining splendors, could cry out, "Glory to God! . . . I have vanquished thee, O Solomon." It still stands, after twelve hundred years of service, a stately monument to the grandeur of his mind and the vastness of his ideas. He also built in the city the great Chalké or Brazen Palace, so called from a bronze ceiled hall, and across the strait the gardens of the Heræum on the Asiatic shores of the Propontis. Cities rose everywhere at his command, and no ignoble ones. We have seen what a circle of forts and walls he built about the Empire, what expensive enterprises he carried on in the Holy Land. He built and endowed many monasteries and churches elsewhere in the Empire. And if he collected sternly he knew how to spend with magnificence. The churches of Rome and Ravenna were adorned by his generosity—one may yet read in the Liber Pontificalis, drawn up by a Roman sacristan, the list of church plate given by the Emperor to the Church of St. Peter. He convoked and celebrated a General Council, which was always a heavy expense to the Empire, for the transportation and support of the prelates. We do not read that he did much for schools. He is accused of closing those at Athens. But they were pagan schools, and modern critics like Gregorovius and others doubt whether they were closed by any formal edict. They fell away by reason of the general misery and the emptiness and inadequacy of their teaching, unfitted for a world that was destined to know no more the serenity of the old Hellenic contemplation, whose weakness it had exchanged for the saving severity of Christian discipline. It is certain that he opened law schools at Berytus, Constantinople and Rome. He made wise provisions for the teaching and conduct of the young lawyers on whom the civil service of the State was to depend. Justinian was no philosopher; he was a theologian and a grave Christian thinker. Perhaps he felt little interest in the propagation of Greek culture. He was a religious orthodox man, troubled about his soul, and concerned with much prayer and inner searching of his spirit. The sweet figments of old Greek poets, like the pure mild rationalism of Confucius, were no food for the ruler of many millions in a decaying and ruinous state, no concern of an Isapostolos, the earthly and civil Vicegerent of the Crucified. He could read in the writings of Cyril of Alexandria, scarcely dead a generation before him, of the follies and the criminal heart of a Julian the Apostate, his predecessor. He saw all around him the hopeless congenital weakness of pagan philosophy to bear the appalling evils of the time. Only the Son of Man could save this last stage of the old Græco-Roman society. To Him, therefore, and the Holy Spirit of Celestial Wisdom be all public honor rendered.

VI.

Had Justinian done nothing but restore to the Empire the members torn from it by the convulsions of a century his name would be forever famous among the great rulers of that ancient State. But he did more—he recast the laws of Rome and made them serviceable for all time—those ancient laws in which, as Sir Henry Maine and Rudolph von Ihering have shown, are deposited the oldest experiences and the most archaic institutions of the great Aryan family to which all Western peoples belong. By this act he passed into a higher order of men than even the autocrators of old or new Rome; he became a benefactor of humanity—one of its solemn pontiffs, peer of Solon and Lycurgus, of Aristotle and Plato, of Ulpian and Papinian—nay, a greater than they, for their laws have either perished from society or survive by the act of Justinian. It is not easy to put in a nutshell a subject of such infinite charm and importance. Gibbon thought it worthy of the most immortal chapter in his book, and pens innumerable have labored at describing this great work as men describe the Pyramids or the Alps, with minds distracted by admiration and the stupor that all true greatness inflicts upon us.

The Laws of Rome! It was a long and varied process by which they grew, the steady exercise of that terrible Majestas Populi Romani. *Leges* and *plebiscita*, *senatus-consulta* and *responsa prudentum*, *i. e.*, the laws of the forum, the Senate and the renowned opinions of learned jurists—they had grown century by century until their number was legion and their individual original wisdom was crossed by their successive contradictions and repetitions. For seven hundred and fifty years before Christ had the City been growing. In that time every human interest had come up for consideration. The functions of war and peace, of conquest and division of spoils and administration, of trade and industry, commerce and luxury, production and exchange and distribution—every interest arising from the soil, or from the family, or from human agreements, or from the attempts of social authority to assure peace by justice and equity—all these had been the object of Roman legislation. Originally local and jealous, so local that it looked askance at the men of Veii and Præneste, scarce a day's walk away, it expanded mightily and took in what was good in all the legislations of the past, all the solid deposit of business, common sense and commercial practice as it was floating around in what came to be known as the Law of Nations. The common Roman might see in expansion only a chance for trade and power; the great thinkers of the State conceived the purpose of this expansion of the city to be, as the Younger Pliny put it, "*ut humanitatem homini daret*," *i. e.*, the spread of the light of civilization

and its benefits, by the red right hand and the dripping sword if need be. Could we read the minutes of the meetings of the Roman Senate on the annexation of Northern Africa after the Jugurthan War we should be reminded, I dare say, of a certain late session of our own august body of legislators, so true is it that history repeats itself.

When the Republic lapsed into an Empire, so gently that the first Emperor dared only call himself the foremost citizen, the law-making power was the first to pass away from the people. Henceforth there are no *leges*—the world is governed by the will of the Imperator, and he acts through Constitutions and Rescripts, *i. e.*, general and particular decisions, which are registered in the imperial chancery and become the actual law of the land. Besides, there was a peculiar annual legislation of the prætor, or city magistrate, and another body of law arising from the opinions of licensed lawyers—ratiocinated decisions that originally won the force of law by their reasonableness, and in time were collected in books and held almost as sacred as Lex or Constitution. What all this reached to, after five centuries of imperial government of the world, one may well imagine.

As the will of the Emperor was the real source of law since Cæsar's death, so the first attempt at a reform or a codification of the law must begin with the Imperial Constitutions. Two hundred years and more before Justinian, in Old Rome, this need had been felt, and the Gregorian and Hermogenian Codes had been prepared for official use. But they were soon antiquated and a new one, the famous Theodosian Codex, was issued in 438 by the Emperor Theodosius II. But it was rare, bulky, costly and therefore not always at hand. Moreover, numerous grave Constitutions had been added since 438, precisely a time of transition, when the law-making genius is called on most earnestly to adapt the rule to the facts. Justinian established, February 13, 528, a commission of ten men—*decemviri*—to execute a new code. Tribonian and Theophilus were the principal lawyers, and they were charged to see that only up-to-date constitutions were incorporated, minus all that was obsolete or superfluous or repetition or preamble. They might erase, add or alter words in the older Constitutions they accepted, if it was necessary for their use as future law. He wanted three things, brevity, compactness and clearness, and in less than fourteen months he received them in the document to which he gave the name of Codex Justinianeus, and which was published April 7, 529.

The next step was harder—it was a question of collecting and sifting the *responsa prudentum*, or answers given by recognized and licensed lawyers, and which had always enjoyed a high degree of

consideration before the magistrates of Rome. They were the real philosophers of the law, but philosophers after the Roman heart, terse, grave, direct, condensing a paragraph of diffuseness into one strong luminous line that seemed to shed truth and peace along its whole length. These answers had been given for over a thousand years, and were then scattered about in numberless treatises—it is said over 2,000, to speak only of those enjoying actual authority. They had been the bane of the Roman bar for many a day. Since they were all good law, and apparently equal, the practice of law had degenerated into citations—whoever had the most dead men to speak for him was the victor. This was intolerable; it came at last to the famous Law of Citations that fixed the five greatest names, and among them, as senior or chief, the immortal Papinian, that high priest, king and prophet of all lawyers, past, present and to come.

At this huge mass of ancient law, therefore, a new commission was directed, under the authority of Tribonian. From this Golden Dust-heap they were to extract, to *enucleate*, what was good and useful as law, or interpretation, or illustration. Out of all the materials they should erect a fair and holy temple of justice, divided into fifty books and these properly sub-divided and paragraphed and numbered. It meant that the decisions of 1,300 years had to be gone over and according to present utility a choice struck and the balance rejected. Seventeen specialists did it in three years. The work was called the Digest or Pandects. There are in it something less than ten thousand *sententiæ*, or brief opinions of ancient lawyers, harmonized, castigated, clarified—at least Justinian and his lawyers thought so. Could Cujas or Donelli have been at their side, what reproachful looks they would have cast! For the Middle Ages hunted out endless contradictions in the huge mass of these "opinions" that only external authority had united. Thereby the ancestors of our present lawyers lived fair and lovely lives with rich benefices and fine gowns of silk or brocade, and the noblest palaces in the town, and ample esteem from Church and State. How they must have smiled when they heard Boccaccio or Pietro Dante commenting on the poet's famous line,

"D'entro alle leggi trassi il troppo e il vano."

It is calculated that by the edition of the Digest a law library of 106 books was reduced to 5⅓, a comparison that only faintly reflects the relief that its publication gave. Finally the Emperor caused the preparation in four books of a manual of the principles of Roman Law, which he called the "Institutions." It became a part of the codified law, being largely a reproduction and adaptation of a similar

work of the second century that was owing to the great jurist Gaius.[27]

This work of Justinian has met with some reproaches from our modern critics; perhaps they are deserved. It has been accused of too much theorizing, too much ratiocination, too much blending of the school-master with the legislator to the detriment of the latter. But what man of heart will blame the Emperor for permitting the pagan Tribonian to preserve the color and tone of second and third century Stoicism, for the occasional brief reflections on the origin and nature of human liberty and human dignity? They are delicious oases in a desert of rigid rules and sententious decisions. In this new Roman Law it is the spirit and the content of the Law of Nations that predominate. The old, hard, selfish Romanism is eliminated. From the Golden Horn the Genius of Order lifts up an illuminating torch to shine afar over the Euxine of the Barbarians and the Hellespont of the Greeks—nay, across the Mediterranean and Ægean, even beyond the Pillars of Hercules, and to follow forevermore with its sun-like radiance every path of human endeavor, every channel of human contention, every relation of man to man and of practical government to its subjects.

This Roman Law, after all, was the salt and the light of the Middle Ages. For love of it, even before Justinian, the Ataulfs and the Wallias, standing at the parting of the ways, had renounced becoming a Gothia and were willing to be incorporated in a Romania. They adopted it at once, begging the Catholic bishops of their new kingdoms to accommodate it to their present needs, their racial genius and their immemorial customs. So arose the invaluable *Leges Barbarorum* of Frank and Burgundian and Visigoth and Vandal. Only, the Catholic Church would have no separatist barbarian law, even of that kind. All her ecclesiastics lived by the genuine and common Roman Law, the Law of Justinian: *Ecclesia vivit lege Romana*. Indeed, she was its second savior, and thereby the savior of good government, for in the West it gradually went over very largely into her Canon Law. It was the basis and glory of her oldest university, Bologna, and was the usual path to honor and fame and power. There are those who regret its excessive vitality, since it bears along with it the stamp of its origin, the absolute will of one ruler, which makes it at all times the favorite code of centralized power. The Code Napoléon is built on it, as are most of the great modern codes of Europe. Even Mohammedan law as it arose, in Egypt and Syria especially, accepted and applied the existing law

[27]The vicissitudes of the law of Justinian in the Latin Middle Ages have been described fully in the classic work of Savigny, and by a host of later writers. For its history in the Orient, cf. Mortreuil, "Histoire du droit Byzantin." Paris, 1843-46. 3 vols.

of Justinian that had been working more than a century in these unhappy lands when, for their folly and stupidity, the night of Islam settled down on them.

It is the Christian, however, who rejoices most at this act of Justinian. Those Roman laws that Tertullian denounced were now baptized.[28] A spirit of humanity henceforth breathed from them. The rights of the Moral Code were incorporated into the legal code; religion was not separate from conduct. The new law showed itself most practical in this that it recognized Christianity as triumphant, as the popular religion, and in many ways made a large place for it, recognized its teachers and chiefs as the principal supporters of the State and of public order. The political life of the Middle Ages is all in the Law of Justinian, especially in the Code of his Constitutions, and for this alone it is the most remarkable of books after the Inspired Writings and the Ancient Councils.

It is not wonderful that Dante, at once the greatest of architectonic poets and last prophet of the Empire, crying out over its grave, should speak more than once of Justinian and his laws. In the famous lines of the Purgatorio (VI., 89) his whole soul flames out in irrepressible anger.

> "Ah! servile Italy, grief's hostelry!
> A ship without a pilot in great tempest!
> No lady thou of provinces, but brothel!
> . . . . . .
> What boots it that for thee Justinian
> The bridle mend, if empty be the saddle?

In the superb sixth Canto of the Paradiso he personifies in Justinian the imperial authority that to him is the basis of the State,

> "Cæsar I was and am Justinian."

Into the mouth of this shadowy shepherd of men he puts that glorious romantic account of the growth of the Roman name and power:

> "What it achieved from Var unto the Rhine,
> Isère beheld and Saône, beheld the Seine
> And every valley whence the Rhône is filled;
> What it achieved when it had left Ravenna,
> And leaped the Rubicon, was such a flight
> That neither tongue nor pen could follow it."

The true career of Justinian appears to the mediæval poet of Italy and Catholicism as that of a "Living Justice" inspired by God, as the career of a man who upheld the "Standard Sacrosanct" of order and equity, and thereby

> "placed the world in so great peace
> That unto Janus was his temple closed."

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[28] Postremo legum obstruitur auctoritas adversus eam (sc. veritatem) . . . Si lex tua erravit, puto, ab homine concepta est; neque enim de cœlo ruit. Tertullian "Apologeticum," c. iv., 20. The entire opusculum is the protest of a great Roman lawyer against the inhuman and anomalous iniquities of the Roman law as applied to the Christians.

Elsewhere (Canzone XVIII., v. 37) he gives voice to the deepest sentiment of the Middle Ages, when he hails in Italy the serene and glorious custodian of law and order, the true heiress of the genius and calling of the Imperium that are indelibly stamped on the Pandects and the Code:

O patria, degna di trionfal fama,
De' magnanimi madre,
. . . . . .
Segui le luci di Giustiniano,
E le focose tue malgiuste leggi
Con dischezion correggi,
Sicché le laudi 'l mondo e'l divin regno.

VIII.

In the preceding pages little has been said of Justinian from an ecclesiastical point of view, partly because it is the civil or profane side of his life that here attracts us, partly because of the vast and absorbing interest of the questions and problems that are exhibited when we lift the innermost veil of ecclesiastical history. It was the fate of Justinian to enter upon the last scene of a passionate conflict whose unity had not been broken for a century. The motives of the last protagonists were not always pure or praiseworthy. Local jealousies, festering old sores of a political or economico-social nature, velleities of Coptic and Syrian independence, violent contempt and hatred for the Royal City and its Greek bureaucracy that these paid back with interest prevented the theological questions of the day from being viewed by all in the dispassionate light of simple faith and old tradition. The wrongs of Nestorius were still a rallying cry in Syria, and the injustice wreaked on Dioscorus still roused the fellaheen of Egypt. Obscene spirits, as usual, abounded and fished fortune out of the troubled waters along which moved painfully the bark of Peter. Old sects, schisms and heresies, almost forgotten by the churchmen of the day, still lived on in remote corners of the Orient, to strike hands on occasion with the Nestorian or Monophysite against the common enemy by the Golden Horn.[29] Here theology and tax gathering were cultivated with equal ardor until the broken peasant by the Nile or the Orontes knew not what he hated most—the latest fiscal oppression or the noble Tomus of

[29]For the history of the government of the Greek churches in and since the time of Justinian the work of Cardinal Pitra is invaluable, "Juris Ecclesiastici Græci Historia et Monumenta," Rome, 2 vols., 1864-1868; cf. the "Oriens Christianus" of Le Quien, Paris, 1740, 3 vols. (fol), and the precious compilation of Leo Allatius, "De Ecclesiæ Occidentalis et Orientalis perpetua consensione," Cologne, 1649. Of great value to the historian are the materials collected by Miklosisch and Müeller, "Acta et Diplomata monasteriorum Orientis," 1871-1890, 3 vols., and by Cardinal Hergenroether, "Monumenta Græca ad Photium ejusque historiam pertinentia," Ratisbon, 1869. Usually fair and well-informed is Neale, "History of the Holy Eastern Church," London, 1847-1850, 4 vols., of which the first two contain a general introduction, the latter a history of the Patriarchate of Alexandria.

the great Leo that the local Monophysite clergy had so distorted as to make it pass for a blast from Antichrist.

Every Emperor from the second Theodosius had longed to close these gaping wounds, and had even attempted the same with more or less success. In the wild and universal conflict the independence of the ecclesiastical power was pushed aside as secondary to the restoration of outward order and concord. It was an age of great personal and corporate ambitions, on the part of the Oriental clergy in particular. The rapid successions to episcopal sees, brought about by heresy and schism, roused an unholy cupidity in the souls of men otherwise inoffensive to Church or State. Only from Rome do we hear regularly the genuine principles of the relations of the two powers, and only there is any effective resistance preached and carried out against the evil Cæsaropapism that lurked in every imperial heart since Constantine.[30] Justinian was no exception. First among the Emperors he attains the character of a theologian by his edicts and decrees in the long conflict that arose with the condemnation of Origenism and ended in the painful business of the Three Chapters. Here he recalled the worst day of Arianism, when Constantius at Milan laughed to scorn the canons of the Church and bade the bishops remember that he was their canon law. Justinian had been brought up religiously; the little manual of conduct that thte good deacon Agapeetus prepared for him is yet preserved and has always been highly esteemed as the parent of those numerous *Instructiones Principum, Monitiones* and the like that we meet with in the Middle Ages. He was profuse, by word and act, in his devotion to the Apostolic See of Peter; he acknowledged the supremacy of its authority that had stood a rude and long test in the Acacian Schism just closed, and the Liber Pontificalis relates with compla-

[30]Much has been written in the last three centuries on the relations of Church and State at Constantinople. Cf. Riffel, "Geschichtliche Darstellung der Verhandlungen zwischen Kirche und Staat," Mainz, 1836, vol. I.; Niehues, "Geschichte der Verhandlungen Zwischen Kaiserthum und Papsthum im Mittelalter." Münster, 2 vols., 1877-1890. The monograph of A. Gasquet, "L'Autorité imperialé en matiére religieuse à Byzance," Paris, 1879, and his "Etudes Byzantines," ib., 1888, are of superior worth. Admirable in every way is Charles Diehl's "Etude sur l'administration byzantine en Italie," Paris, 1888. Especially ch. vi., pp. 368-417, on the relations of the Roman Church with the Emperor of Constantinople. They may be read most usefully in connection with the notes of the Abbé Duchesne to his edition of the "Liber Pontificalis." Cf. Ternovsky, "Die griechische Kirche und die Periode der allgemeinen Kirchenversammlungen," Kiew, 1883; Gelzer, "Die politische und kirchliche Stellung von Byzang," Leipzig, 1879; Krüger, "Monophysitis che Streitigkeiten im Zusammenhang mit der Reichspolitik," Jena, 1884. These latter works are colored by the peculiar convictions of their learned authors, as is also Pichler, "Geschichte der kirchlichen Trennung zwischen Orient und Occident," Munich, 1864. The Catholic point of view is magisterially expounded in the first volume of the classic work of Cardinal Hergenroether, "Photius," Regensburg, 1867-69, 3 vols. It also contains the best resumé of Byzantine Church history before Photius. Of this work Krumbacher, the historian of Byzantine literature, says (p. 232): "Hauptschrift über Photius ist und bleibt wohl noch langer Zeit das durch Gelehrsamkeit und Objectivität ausgezeichnete Werk des Kardinals J. Hergenroether." In Pitzipios, "L'Eglise Orientale," Paris, 1888, there is a popular description from a Catholic viewpoint of the politico-ecclesiastical rôle of the city and clergy of Constantinople from its foundation.

cency his gifts to the Roman churches. He received Pope Agapetus with all honor, but his treatment of the unhappy Vigilius has drawn down on him the merited reprobation of all.[31] Perhaps he felt less esteem for the person of the latter, whom he had known intimately as a companion of Agapetus; perhaps, too, his own final lapse into the heresy of an extreme Monophysite sect was a just sanction for the violence done to a sinning but repentant successor of Peter. He confirmed the ambition of the patriarchs of Constantinople and secured finally for them the second rank, at least in honor. Under him the third canon of the Council of Constantinople (381), and the twenty-eighth canon of the Council of Chalcedon (451), that Rome had energetically rejected, were tacitly accepted. In the long struggle the honor and the liberties of Alexandria and Antioch had gone down in spite of the papal efforts to save them. The consequences of this were seen within a century in the rapid unhindered spread of Islam over Egypt and Syria and its assimilation of Persia, whereby the fall of Constantinople was made certain. He ruled the churches at pleasure, and with a rod of iron, divided ecclesiastical provinces, deposed and exiled the highest patriarchs, and not only humiliated Saint Peter in the person of Vigilius, but compelled his successors to ask for imperial confirmation and to send large sums of money to secure it. It was well for the churches that no second Justinian followed him. But his despotic temper and his precedents were not soon forgotten. Perhaps it may be urged for him that he met habitually only a weak and sycophantic curial clergy, and that the ancient bonds of Empire were all but dissolved in the Orient. He is still remembered in the Greek Church for his hymns, one of which is still in frequent use.[32] Indeed, he is, perhaps, the oldest hymnographer of the Greeks. But when all has been said, it remains true that his was the timely, welcome, and long reign of an orthodox Emperor, that he broke the impact of Monophysitism, that he was generous beyond measure to the churches, and to the poor extremely charitable. The Christian episcopate of the East looked on him as a father and a providence, and in the storms of the century he was never too far below his high calling. The Western churches loved

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[31] Cf. "Liber Pontificalis" (ed. Duchesne) s. v. Vigilius; Duchesne, "Revue des Questions Historiques," April, 1895. Thomas Hodgkin, "Italy and Her Invaders," Oxford, 1896 (2d ed.), vol. IV., c. xxiii. "The Sorrows of Vigilius," pp. 571-594.

[32] "Only-begotten Son and Word of God, Immortal, Who didst vouchsafe for our salvation to take flesh of the Holy Mother of God and Ever-Virgin Mary, and didst without mutation become man and wast crucified, Christ our God, and by death didst overcome death, being One of the Holy Trinity and glorified together with the Father and the Holy Ghost, save us." Julian, "Dictionary of Hymnology," London, 1892, p. 460. Cf. Edmond Bouvy, "Les Origines de la Poésie Chrétienne," in "Lettres Chrétiennes," vol. IV., 1882, and for the hymn, Christ and Paranikas, "Anthologia Græca Carminum Christianorum," Leipzig, 1871, p. 52. Stevenson, "Du rhythme dans l'hymnographie grecque." Correspondant. Oct., 1876, and the epoch-making essay of Cardinal Pitra, "Hymnographie de l'Eglese Grecque," Rome, 1867.

to remember him as he is depicted in mosaic in San Vitale at Ravenna, clad in imperial purple, surrounded by his officers of state and offering gifts to the bishop of that see.[33]

To the bishops of the West, standing amid the ruins of Roman civilization, his person and reign appeared like those of another Constantine. He was, indeed, a beacon light, set fair and firm where the old world of Greece and Rome came to an end, and along its last stretches the stormy ocean of mediæval life already beat threateningly.

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ANGLO-SAXON MISSIONARY METHODS.

THE results and methods of Catholic and Protestant missions to heathen races in the modern world are so essentially different that the use of "missionary" as a common name for the agencies of both is open to grave misconception. The great majority of the latter are carried on by English-speaking nations, and there is a strong similarity between the sentiment which inspired their origin and which is professedly more national than religious. In the usage of to-day "Anglo-Saxon" is much used as a designation, however defective, for the characteristics of the populations which look on English traditions in politics, social life and religion as specially their own inheritance. Many claim the designation in this country rather than that of American, and by such a class the Hawaiian mission has been conducted. For this reason only we have given the above title to our brief history.

The history of missions begins with Christianity itself. The charge "Go and teach all nations" was the authority for the first mission, the Apostles the first missionaries. Ever since missions have formed an important part of the work of the Church in the world. To convey the religion taught by Christ to those outside

[33] On the affection of the Christian episcopate for the empire, cf. Boissier, "La Fin du Paganisme," Paris, 1891, vol. II., p. 491. The letters of Gregory the Great (590-604) are a proof of this idealistic devotion that disappeared at Rome only during the Iconoclastic follies. Even as late as Fredegarius and Isidore of Seville the "imperii felicitas secura" was for the Catholic clergy of France and Spain the model condition of civil affairs.

the Church is as much a duty of her pastors as the instruction of the Catholic people within. There have been times of greater or less extension of the Church, but there is none at which missionary work was not carried on among some non-Christian population.

The establishment of Christianity in the Roman Empire was followed by missions for its spread among foreign nations. St. Patrick in the fifth century, Columba in the sixth, St. Augustine in the seventh and Boniface in the eighth kept up, without break, the work of extension. The next four centuries were marked by successful mission work in Poland, Hungary, Scandinavia and the Slavonian nations. In the thirteenth century Dominicans and Franciscans were teaching Christian doctrine to Mongols and Thibetans and Catholic Bishops were established in remote China. The great inroad of Mahometanism under the Tartar races in the fourteenth and fifteenth centuries arrested for a time the progress of Christian missions, but the work was taken up again with renewed vigor when Columbus opened America and Vasco de Gama Asia to intercourse with Christian Europe. The chain of Catholic missioners has continued in America from Las Casas to Father De Smet, in Asia from Francis Xavier to the martyred Bishops and priests of Tonking, in the islands of Oceanica from Urdaneta to Bishop Battailon, in Africa from Francis of Assisi to Cardinal Massaja.

The hundred and fifty years that preceded the Protestant Reformation was the period of least outward extension in the whole history of Christianity. The Turks and Mongols and Moors girdled Europe with Mahometan foes and cut off nearly all access to the heathen lands beyond. With the discovery of America a new field was opened for Catholic missionary activity which was actively cultivated during the next three centuries.

Las Casas and Pedro de Cordova began the work of converting the American natives before the revolt of Luther. It was continued by a host of successors through both American continents from Canada to Patagonia down to our own days. The Reductions of Paraguay and California, the heroism of Peter of Ghent, Betanzos and Zumarraga in Mexico, the dauntless charity of Jogues and Brebœuf in Canada are only a few chapters in the mission history of America from Las Casas to Father De Smet and Archbishop Seghers. An Indian Catholic population of at least twenty-five millions is to-day the proof that this work was not in vain. In Asia under the rule of pagan monarchs similar results were attained. The converts to Christian belief in Japan numbered nearly a million in the seventeenth century and more than half that number in China. In India, from the capital of the Mogul to Cape Comorin, Catholic congregations were formed everywhere. In Annam to-day, after

fifty years of persecution as unsparing as any in history, nearly a million of Christians are a monument of the success of Catholic missions. The seven millions of Catholics in the Philippines are another.

It is a historical fact that in all this diffusion of Christianity no part was taken by the European nations which had separated from the Church in the Protestant Reformation. Spaniards, Portuguese, Frenchmen and Italians, Belgians and Germans all shared in the work, but the Protestant nations, though claiming to be Christian, took neither part nor interest in the conversion of heathen populations. England and Holland were the most prominent nations in the work of European colonization and conquest during the seventeenth and eighteenth centuries, but their governments and people alike showed no desire to impart their religions to the native races with whom they came in contact. While the English populace was denouncing the "idolatries" of Catholics at home and sending Archbishop Plunkett and the other victims of the Popish Plot to the scaffold in their zeal for Protestantism, the founder of Calcutta, Job Charnock, was offering sacrifice to Siva at the grave of his Hindoo wife, and the Dutch merchants were trampling on the Cross in Nagasaki to prove to Japanese pagans that they were not Christians like the converts of Francis Xavier. High minded men like the Irish Berkeley and the New England Eliott attempted in vain to excite the religious feeling of the English people to the conversion of the American Indians. At the close of the American Revolution there was hardly a single English Protestant of any denomination engaged in the conversion of heathen races in any part of the world.

In the ferment of social projects which marked the era of the French Revolution that of the conversion of heathens to Christianity attracted attention among English Protestants for the first time. It was a time of new ideas and reforms of every kind—poor schools, penology and reading rooms—and money was forthcoming freely for putting such ideas into practice. After considerable discussion a body of three hundred ministers of various denominations organized, in 1795, the London Missionary Society. Its professed object was "to lead heathen populations into gradual acquaintance with the glorious Truths of Revelation." The methods of attaining this desired end were the circulation of the Bible and founding small colonies of clergymen and artisans as "little models of a Christian community" in such localities as would guarantee safety of life, a healthy climate and no inordinate difficulty of languages to the prospective apostles. The expenses were to be met in the first place by subscriptions from the charitably disposed at home and afterwards by the returns that might be expected from developing the resources

of the lands evangelized. The South Sea Islands were selected as the first field of the new missionary experiment on all the above grounds and also in view of the convict settlements in Australia which had been begun by the British Government at Botany Bay. Benevolent individuals subscribed freely to the new and romantic enterprise. A vessel was purchased and thirty or more "missionaries" of various trades, with their families, were furnished with passage and support to the South Seas to begin the new work of converting the heathen there. The missionary vessel, it may be added, secured a cargo of tea for her home trip, thus combining zeal and profit in characteristic English fashion.

The enterprise thus begun proved a financial success. The white men got grants of land and built up comfortable homes in the tropics and the natives accepted them as their superiors instinctively. Numerous other missions on the same plan followed during the next few years. The various Protestant missions, both English and American, now spread over the world and which have become so conspicuous lately in China, Turkey and other lands, are nearly all founded on the methods of the original London Missionary Society. Though their result has been insignificant as far as the spread of Christianity is concerned, the missionary element is an important factor in the commercial and political world to-day. The word "missionary" in modern English ideas conveys an idea so widely different from the meaning attached to it by history and the Catholic world that with the majority it has become a term of scorn. Lord Salisbury's late address to the English missionary representation is a strong illustration of the fact. To confound the work of St. Francis Xavier, of the civilizers of Paraguay and the martyrs of Japan and Corea with so-called missions of the English type is a crime against the well being of humanity itself. It seems to us that the difference can best be shown by the detailed history of a modern Protestant mission. We shall select that of Hawaii, which has been for many years put forward as a successful instance of the Christianization of a heathen people by Protestant mission methods. The missionary organization which undertook has proclaimed the work complete and ended. It has had its history officially drawn up by one of its officers, Dr. Rufus Anderson, who claims full acquaintance with its details. His statements have been supplemented by a history, lately published by the last native Queen of the race, converted Liliuokalani, as well as by numerous other eye witnesses. We shall let all these tell the methods and results of modern Protestant mission work.

The mission to Hawaii was the work of the New England Congregationalist body, which at the time was the State Church of Massa-

chusetts. Conversion of the heathen had formed no part of Puritan religious activity for two hundred years after the settlement at Plymouth Rock. According to Dr. Anderson it was about 1816 that the attention of New England Protestants was first awakened to the duty of communicating revealed truth to the pagan world. The first attempt at discharging the duty was a very modest one. About twenty-five boys and young men from different foreign countries, who had come to Boston in the course of trade, were gathered into a school at Cornwall and there taught English and church attendance. The wisdom of the newly established "Board of Commissioners for Foreign Missions" considered that after a few years of this schooling the wanderers would return home and make Christians of their countrymen by their shining example. These artless hopes were rudely disappointed, as might be expected, and the school was closed in a few years. The Board next ventured on a more daring attempt to send out ministers of the Gospel, already trained as such, to the foreign lands. With some distrust in purely religious agencies, it decided to add laymen of different occupations who might be willing to seek fortune abroad and incidentally to furnish the heathen with good example of Christian lives. Three young ministers, all newly married—Messrs. Bingham, Thurston and Whitney—offered their services for the task. A doctor, a printer and a farmer, with five children, made up the "missionary" colony. Passage was secured in a Boston vessel bound for Hawaii and a large stock of goods provided for the support of the mission and profitable dealing with the natives. The party reached Hawaii without accident in 1820.

They found Hawaii perfectly safe as a residence for strangers. A native chief, Kamehameha, had brought the whole group under a single despotic government during the early years of the century. His conquests had been largely effected by the use of European arms and the help of European deserters from the ships which touched at the islands. Some of these had been made Governors of islands, and respect for Europeans had become a principle with the native chiefs.

Under the strong hand of Kamehameha the wars, formerly common among the different tribes, had been stopped, and deeds of violence or robbery among the population were suppressed by summary executions. The evidence of the missioners and of subsequent visitors attest that deeds of violence were rarer among the people of Hawaii than in most parts of America or Europe. The high chiefs, it is true, held power of life and death over their inferiors as absolutely as the Sultan of Turkey, but they carefully avoided any violence towards Europeans. The young King readily granted the land asked for a settlement by Mr. Bingham and expressed his pleas-

ure at the arrival of the newcomers. He visited the ship which had brought them in his native dress, and even got drunk on board, as the mission chronicler relates.

A circumstance specially favorable to the teachers of a new religion at this time had just occurred. The Hawaiian original belief was tolerably vague. A number of supernatural beings were recognized as deities, one of the most formidable being Pele, the presiding spirit of the great volcano of Hawaii. An elaborate system of superstitions or "Tabus" regulated the life of the people under the supposed sanction of the native gods. Men and women could not eat together, and various articles of food were strictly forbidden to different classes, and even to women of the highest rank. On the death of Kamehameha two of his widows were regarded as the highest persons in the State, though the son of one of them was the nominal King. The royal ladies found the Tabus inconvenient, and advised their abolition. The young King and other chiefs feared disaster if the attempt were made, and some agitation followed among the people. A curious incident settled the difficulty. Two temples had been built, and the King was required to dedicate them according to traditionary usages. He, unfortunately, imbibed too much rum at the ceremony, and not only confused the rites, but broke the great Tabus by eating roast dog with the women and smoking from their pipes. As no manifestation of supernatural wrath followed, the whole native religious system was pronounced a fraud by Queen Kaahumanu and the chiefs of her party. The temples were closed, numbers of idols burned and the old rites forbidden to the people. This had occurred before the landing of the New England missionaries, who found a land absolutely without a religion in consequence. The Queens were ready to adopt some substitute, on the European plan, if they could find one, but the King was anxious to continue free from restraint on his habits by religion of any kind.

The missionaries made no attempt to explain the purpose of their coming for some time. In fact, they had no knowledge of the language, and besides their time was occupied in providing suitable houses for their families in which the furniture and other resources of civilization might be properly displayed to heathen eyes. Three pupils of the Cornwall school had been brought as interpreters, but they proved useless, as the mission chronicler explains, because their education had been confined to teaching them English and had given them "very few ideas." The missionaries, then, had to learn the native language themselves, and they evidently found it a hard task. An easier method of reaching the confidence of the Queen, however, was found. She became deeply interested in the dress of

the missionaries' wives and employed them to make similar articles for her own use. The picture of the trials of modern missionaries given in Mr. Bingham's letters to the Board is graphic and unique.

"Just look into the straw palace of a Hawaiian Queen, in the first or second year of our sojourn among them, and see a missionary's wife waiting an hour to get Her Majesty to turn from her cards to try on a new dress for which she has asked. Hear her curt remarks: 'Too tight; off with it; make it over again,' and see the lady patiently obeying the orders." But the reward was to come. "Within another year Kaahumanu, Keopaluna, Kapiolana and other chiefs threw around themselves an air of rising consequence by the increase not only of clothing, but of furniture, noticing and trying to imitate what attracted their attention in the mission families. The mission," adds the historian, "was divinely guided on the right way. The ladies had been well educated in domestic habits. They showed the native women how to make garments for themselves and their children." Millinery as an agent of conversion is certainly a new discovery in the annals of the human race. Mr. Bingham deserves whatever credit it may bring him as a Christian missionary. Kaahumanu, under the influence of her new silk dresses, declared herself willing to take up the "prayer" of her dressmakers instead of the old rites. The offer was hailed as a triumph of grace, but some peculiarities of conduct in the royal proselyte made the missionaries doubtful about receiving her as a real Christian. She had just taken as husband a chief of Kaui, who had at least one other wife. She also was inclined to have natives who incurred her anger killed without ceremony, and finally she even treated the missionaries as her inferiors. The mission historian in another place gives the information that Kaahumanu had a resemblance to the English Elizabeth, and even declares that her disposition was very like that of the head of the mission, Mr. Bingham himself. For all these causes the missionaries deemed it best to defer her reception into the fold for some years.

The science of Christian dressmaking was confined to the female evangelists. Mr. Bingham found another work in the art of printing. It does not appear that he was able to make himself understood by the natives in their own tongue when he began the work of translating parts of the Scripture and hymns into Hawaiian. He made out a simple alphabet of twelve English letters, after an ineffectual attempt to imitate the work of the Cherokee Sequoia, by reducing the Hawaiian tongue to a syllabary. The printer of the mission now came to be as useful as the dressmakers in gaining attention. The new invention caught immediate attention. A chief got a few printed sheets, and in a month and a half had mastered them

so far that he wrote a short note himself to the missionaries. The novelty attracted the simple natives irresistibly. The chiefs not only learned to read, but ordered their people to do the same. As soon as some natives mastered the art they were ordered to go as teachers among the others. Within a few years fifty thousand of all ages were working at the printed sheets furnished them by the mission, and nearly a third of them, it was claimed, could read fairly well. When we are told that a woman of 80 accomplished the task it does not seem as if the new accomplishment involved any special intellectual effort. It came to an end about 1832 nearly as suddenly as it had begun. The reason given is that the teachers had exhausted their knowledge. Dr. Anderson admits that the native teachers could not have a very adequate idea of the nature of religion, but he adds sagely: "What they taught was invaluable."

The spread of reading was exclusively a native occupation. Some missioners who visited Molokai for the first time found over a thousand scholars, such as they were, in that island. The books, however, were furnished by the missionaries and proved an important source of income. With prudent thrift "the mission deemed it best for the natives to pay for their books in products or in labor." In some places native cloth, in others wood, in all meat, fresh vegetables and labor were required. Even land grants seem to have been known. Boki, a chief whose fondness for native customs caused much grief to the missioners, gave a valuable estate at Pauhunau to Mr. Bingham. It is now the seat of the Oahu College.

While the printing and millinery departments of the new mission were thus favorably progressing, both in the way of revenue and in gaining royal favor for their practitioners, it does not appear that anything in the way of teaching the doctrines of Christianity was done for four or five years. Several chiefs, like Kaahumanu, were quite willing to call themselves Christians, much in the same way as Kamehameha had raised the British flag years before on the advice of Captain Vancouver. Hardly any, however, knew enough even of the simplest principles to warrant their admission. The Queen mother, Keopulani, was one of the would-be proselytes. She was attacked by fatal illness in 1823, and two missioners went to see her and decided she had better be baptized. A large number of the chiefs, however, were present, and the missionaries felt that their knowledge of the language would not warrant them in explaining the significance of the rite to the Hawaiian intelligence. Their embarrassment was relieved by the arrival of an English visitor from Tahiti who could speak Hawaiian and did, actually, baptize the Queen. This and the marriage of one of the original interpreters to a native woman seem to have been the only public acts connected

with religion that were offered to the natives during the first three years of the mission.

It was felt that something must be done to give a more positively religious character to the work for the satisfaction of the subscribers at home in America. A favorable opportunity offered in 1824. A native chief revolted in Kaui, and Kaahumanu sent a thousand warriors to put down the insurrection. It was the old custom to begin battles with some religious forms, and as the Tabus were suppressed the Queen Regent adopted a kind of semi-Christian rite. The warriors were ordered to observe a day's fast and to put off battle till after Sunday. The observance of the Sabbath appears to have been a main article of Christian practice in the system of the New England missionaries. The battle was fought with all the old savagery and won by the royalists. Kaahumanu accepted the victory as a proof of the superiority of the white man's "prayer" and renewed her request to Mr. Bingham for enrollment as a Christian. The missionaries apparently concluded it best to accommodate her and to make some attempt at giving the nation the name of Christian. The Regent and several other chiefs were baptized, and in return Bingham became the Queen's Chief Counsellor. A number of the chiefs even began to hold prayer meetings among their followers without further instruction from the missionary teachers. Kaahumanu held a great council, in which she proclaimed her determination to govern hereafter on the precepts of the Gospel. The missionaries on their part declared they would not interfere in politics, but that as teachers "they would declare the whole Word of God, whatever its bearings might be on former customs or existing proceedings of government or people." With a despotic sovereign pledged to obey the Gospel teachings, and the missionaries the recognized exponents of the Gospel, it is not easy to see the value of the promise.

The laws, in fact, began immediately to take on a peculiar character. Strict observance of the Sabbath was ordered for all the natives and penalties decreed against the liquor traffic, the use of tobacco and the observance of many of the native customs which did not meet the approval of Mr. Bingham. In some parts of the islands, we are told, the natives ascertained the date of the Sabbath, and on that day put on their best clothes and went to sleep in their houses. The native dances, and especially their custom of chanting over the dead, were strictly prohibited, though on what principle it is not easy to discover. Uncouth manners must be changed was the missionary maxim strictly enforced. It is curious that in 1826, when hardly any natives had as yet received Christian instruction, a decree was issued that all marriages should be performed by the mission-

aries alone. The historian does not mention what offerings were required of the contracting parties on these occasions.

Some troubles with English and American visitors to Honolulu arose from the new regulations. The United States sloop Dolphin visited the islands in 1825, and her commander insisted that a regulation forbidding women to go on board ships should be abrogated. It was an unsavory business and resulted in the trumping up of claims of American citizens against the native chiefs to the amount of half a million dollars. Another American vessel visited Honolulu the next year to enforce this claim, and a tax of sandalwood had to be levied on the population to meet the extortion. With this display of the power of foreign nations the dependence of the Queen on Bingham was increased enormously. She determined that the common people, who had hitherto been left to themselves by the missionaries, should become Christians. In company with several missionaries, for the force of the latter had been greatly enlarged by reinforcements from New England, she made a tour through Oahu and preached in her own fashion to the people. The result is best given in the words of Dr. Anderson:

"The people were accustomed to obey the chiefs without hesitation. The chiefs gave orders to build churches and school houses, to learn to read—they did so; to listen to sermons of the missionaries, to forsake sin and turn to the Lord—they put on, without hesitation, the form of religion at least." It is not surprising that a couple of years later, when the young King took authority and withdrew the law of compulsory attendance at church and schools, both were at once deserted. The mission historian consoles himself by the reflection that the "mass of the population must have had glimpses, at least, and many distinct apprehensions of the fundamental doctrines of the Gospel. Such was the conversion of the Hawaiians when an American President, Quincy Adams, sent the missionaries congratulations on the progress in the islands of letters and true religion, the religion of the Christian Bible. The action of Kaahumanu and her missionary guides towards the Catholics in Hawaii is a strange comment both on the tolerance and the truthfulness of the latter and of the spirit which the new religion inspired in its converts. Two priests, Fathers Bachelot and Short, landed in Hawaii in 1827, as the New England missionaries had seven years before, to instruct and convert the natives to Christianity. The pagan chief who then ruled had encouraged the spread of instruction and given lands to the preachers of religion. The recently baptized Kaahumanu made the profession of Catholicity a crime and branded the Catholic religion as idolatry. Nor was this a passing outburst of savage temper. A bitter persecution of the natives who joined

the Catholic Church was kept up for ten years until ended by the interference of France in behalf of religious toleration. The allusions to this descreditable portion of the mission history made by Dr. Anderson are both disingenuous and cowardly. He admits the banishment of the priests and a persecution of their converts, but he claims that it was the act of the native Queen alone and alleges that her own reasoning made her regard Catholicity as identical with the old heathen rites of Hawaii. His further statement that when she was disabused of this idea the persecution ceased is a direct falsehood. The persecution continued seven years after the death of Kaahumanu, while Bingham's influence was still supreme. Dr. Anderson admits that toleration was only granted in 1839, and while cautiously disclaiming any endorsement of persecution he describes the demand for toleration made by the French naval officer as an "outrage on the natives." He appears perfectly ready to proscribe Catholicity, if it could be done in secret, but shrinks from acknowledging the fact.

A full report of the persecution was drawn up at the time by Father Short and the Brothers who remained in Honolulu after his first expulsion. It is substantiated by decrees issued in the name of the Hawaiian King and reports from Honolulu newspapers. From these sources we give the story of the new Puritan persecution in Hawaii.

The Catholic missionaries had entered Hawaii as other Europeans did. The Queen, under Bingham's advice, endeavored to drive them away by threats, but no heed was paid to them. A number of natives began to attend the Catholic services and ask instruction. Several were baptized and a Catholic congregation was growing up in Hawaii when the Queen issued a decree forbidding attendance at Catholic worship. Though the natives were accustomed to obey their chiefs in professing any religion, as Dr. Anderson declares, the Catholic converts proved an exception. They continued to practice their religion in spite of the royal decree, and in consequence a number were arrested in 1830 and imprisoned for some months. They were required to abandon the Pope's religion and join "Binames prayer," and on their refusal were sentenced to hard labor on the fortifications.

The young King about this time showed an inclination to assert his own authority and the persecution ceased a while. Kaahumanu soon recovered her ascendancy. The next year nine natives were condemned to hard labor and confiscation of property for profession of the Catholic Faith. One, Esther Uhete, was a high chief, but she was treated with the same brutality as the others. They were kept at their task till the death of Kaahumanu, in 1832. In the meantime

Fathers Bachelot and Short were arrested, put forcibly on a vessel owned by the native government and sent to California.

Kaahumanu died in 1832, and the young King, Kamehameha III., showed some inclination to throw off the control already assumed in government by the missionaries. The Catholic prisoners were released, on the request of the English Consul, and attendance at Protestant service was no longer enforced. In consequence the churches and schools were deserted by the natives and the mission seemed in danger of a complete collapse. Kinau, the daughter of the first Kamehameha, was, however, as devoted to Bingham's influence as her step-mother, and she had a strong party among the chiefs. The young King soon resigned himself to her guidance, and the persecution of Catholics began again. In 1835 about twelve men and women were arrested as adherents of the Pope, and by a refinement of brutality were set to cleaning the privies of the fort at Honolulu with their hands. The English and American Consuls remonstrated against these brutalities, but their demand was opposed by Mr. Bingham in person. He declared that all the natives should have only one thought in religion, and the chiefs accepted this theory as part of the new Gospel.

Though sending home glowing accounts of the conversion of Hawaii, the missionaries about this time were seriously alarmed as to the future of their mission. The readiness with which the natives had abandoned all practices of the new religion when Kamehameha III. relaxed the decrees of his step-mother showed how little hold the new doctrines had. Less than two thousand converts had been enrolled as church members during 19 years. The fad for reading schools had completely ended and the tangible evidences of Hawaiian Christianity that could be reported were mainly the European dresses and furniture adopted by the chiefs. Mr. Bingham, we are told, urged the industrial development of the country on the New England Missionary Board as the most promising field for evangelical labor. His suggestion was not adopted for prudential motives. A revival on the well-known New England system was next tried. This is known in missionary annals as the great awakening of 1837. The natives of all classes were hunted up by the mission servants and gathered for prayer meetings, at which their feelings were wrought up to hysterical outbursts of shrieking and praying. The missionaries profited by the excitement to enlarge their nominal following. The common people had not, as a rule, been admitted to baptism on the ground of their want of adequate instruction. The revival meetings were assumed to have remedied this defect and the attendants were baptized into the Church indiscriminately. Within three years over twenty thousand were thus

enrolled. One missionary, Mr. Coan, baptized over seven thousand on his own account. The mission historian records that a year later he found the new converts more ignorant and less religious than before the great awakening. Similar experiences are not confined to the Hawaiians.

The revival had been the signal for greater persecution of the Catholic natives. In 1838 six were sentenced for life to hard labor, and three women among them were further condemned to work in the chain gang with public prostitutes. This dirty infamy speaks volumes of the moral tone of the Protestant missionaries then in Hawaii. Fresh cruelties were also tried. Catholic women were triced up by the wrists for many hours to compel them to adopt the "prayer of Bingham," and that worthy himself witnessed the torture in his carriage. The persecution continued until a French frigate, L'Artemise, arrived in Honolulu and its captain required the release of the Catholic prisoners and full freedom for the exercise of religion in the future. The King accepted the terms and the latest persecution was thus ended. Dr. Anderson describes this demand for toleration as an outrage on native rights!

With the death of Kinau, in 1839, the influence so long enjoyed by Mr. Bingham with the government was shaken. The King showed less regard for his religious teachings than his sister and stepmother had done and developed an attachment for old customs, which promised ill for his continued submission to the new ways of life. The missionaries and their lay assistants were nearly a hundred, and as the revival had failed to bring any permanent accession of native converts, mission energy was turned to politics.

The old tribe organization, as it was throughout all the Polynesian islands in the days of Cook, was practically the only government known in Hawaii under Kaahumanu and Kinau. Every tribe had a hereditary chief, whose power over everything in his domain was absolute and unquestioned. In old days a kind of supernatural character was attached to the persons of the great chiefs, and disobedience to them was held as a sacrilege. In Hawaii when Kamehameha I. made all the islands obey his authority, he merely became the greatest among many other great chiefs who still continued to rule their own tribes as before. Each chief divided the land, the fishing grounds and the woods among his people in separate plots for their support and kept others for his own use which were worked for his benefit by the common labor. The sale of land was unknown, the territory of each tribe was its common property and the chief only regulated its use. Like the old Highland chiefs, each kept a number of personal retainers, who lived in grass huts around the chief's dwelling and were supported from his lands. The only

change introduced by Kamehameha was the appointment of special governors over the different islands and the building of a fort and some vessels as a royal military force. The revenues of both King and chiefs were drawn mainly from their lands. The King levied small dues on foreign vessels and licenses for some occupations, especially distilling and liquor selling. The great chiefs formed a council for the King and practically controlled his action. Decrees from this body or the King alone were occasionally issued as laws, but foreigners paid little attention to them, nor was there any special force to put them into execution except among the natives.

The missionaries had been quite content with this system of government so long as supreme authority remained in the hands of the two Queens, who implicitly followed their own instructions. With the death of Kinau in 1839 and the stop put to persecutions of Catholics, a change came over the missionary minds. They decided that mission interests called for a government of more civilized form, as they had been held to call for the substitution of European dress for the native bark clothes and feather mantles. The native ideas of land tenure appeared particularly barbarous to their ideas, and they urged the necessity of reform in this point on the chiefs with more earnestness than religious doctrines. At the departure of the first mission colony from New England a sermon had been preached, the text of which, according to Dr. Anderson, was the significant one, "There yet remained very much land to be possessed." As the Hawaiian land could not well be possessed by the missionaries while it remained common tribal possession, Mr. Bingham and his colleagues now decided it their plain duty to get the tribal system abolished. There were, however, only about eighty white men in the colony, so persuasion, not force, was adopted to accomplish the desired end. The missionaries advised the King to organize his country on European political models, holding out the promise that he would then be looked on as an equal with Kings of England or France, whose ships had recently threatened to take summary possession of the country. As the native intelligence knew nothing of the forms of European governments, the missionaries kindly furnished them with instructors from their own body. The great revival was over and had left the natives more indifferent to religious instruction than before, so some other field of action had to be found for missionary energy. The Rev. Mr. Richards undertook to give lectures on law to the native chiefs, to show the importance of the proposed reforms. Dr. Anderson informs us that the worthy divine had no legal training, but was gifted with "sound common sense" and had really graduated from a Congregational seminary. To prevent any insinuations about interference in poli-

tics on the part of teachers of religion, the good man renounced the ministry and took charge of such papers and records as existed among the chiefs at a fair salary.

The first step towards a civilized government for the Hawaiians the missionaries decided ought to be a written constitution. The chiefs acquiesced trustfully, but as they did not know what a constitution was like, they asked their religious teachers to make one for them. The method adopted was unique in the history of legislation, as Dr. Anderson triumphantly declares. A school had been established at Lahainula six years before, when the reading "bees" of the first days went out of fashion. This school was intended to provide the mission with native assistants in teaching and other works, though natives were not considered by any means fit to become ordained ministers. To the pupils of this school the task of preparing a constitution was entrusted, and the document was produced within a couple of weeks. As given by Dr. Anderson, it is a curious jumble of extracts from the Old Testament, the Declaration of Independence and other generalities, coupled with shrewd provisions that lands should be allotted to individuals and sold at will and that new titles should overrule old ones. The King signed it as an act of his sovereign power, and things went on as before among the natives. However, Hawaii had a constitution. Three years later an English war vessel entered Honolulu and its captain, Lord Paulet, of his own authority declared the islands British territory. The act was subsequently disowned by the English admiral on the station and the British flag hauled down. Dr. Judd, the successor of good Mr. Richards, carefully hid the precious document in the mausoleum of Kamehameha during this crisis. His devotion to Hawaiian nationality is warmly commended by the mission historian.

More practical measures followed the constitution. There were over a hundred pupils in the mission seminary and small demand for them as teachers of religion. The chiefs were urged to set up a public school system, make the natives build school houses and compel universal attendance and payment for the teachers. An advantage of a constitutional system among untutored Polynesians that had not escaped the "sound common sense" of its inventor was that missionaries had to be called into the councils of the chiefs permanently to show how it should be worked. The compulsory school law was readily decreed under these circumstances, and Mr. Richards received control of the schools, under the title of Minister of Education. About a hundred pupils of the seminary were thus provided with salaries as mission dependents, and at the same time the other government offices were subjected to a large extent to the recommendation of the Minister of Instruction.

Another development promised to give the missionaries control of the future sovereigns of Hawaii. The old chiefs, of course, could not do more than follow directions in managing the government on the new plan. It was pointed out that their children ought to be trained specially for their future duties, and another missionary, Rev. Mr. Cooke, and his wife opened a royal boarding school, to which all the children with any prospect of royal succession should be sent at an early age. The last five native rulers were sent to this establishment young—in some cases at three or four years. According to Queen Liliuokalani, who was there, thrift was a marked feature of the Rev. Mr. Cooke's boarding school for royalty. She says the teachers forgot that growing children had appetites, and that the young Hawaiian scions of royalty had often to beg food from the cooks or forage in the garden for roots or leaves of plants. It is possible that this experience of New England thrift had some effect in spoiling the results hoped for in the way of ascendancy over the future Kings. All the pupils of the royal school showed in after life scanty affection for misssionary influences. Their teacher, Mr. Cooke, kept his school for ten years and then quitted it and the ministry to go into mercantile business, in which he acquired a large fortune.

A Legislature, with parliamentary law and officers, was the next step taken towards the Christianization of Hawaii. However, as the chiefs were already accustomed to debating politics among themselves, its effect was not remarkable. The land regulations had a more important effect both on the condition of the natives and their missionary guides. The latter urged the wisdom of cutting up the lands into separate holdings. One-third was to be set apart in private property to the King and his successors. Another third was to be divided among the high chiefs, and the remainder among the people at large. The good Mr. Richards assisted in the division, as land surveying was not familiar to the natives and their metes and bounds were based on other methods. It was found when the chiefs had been satisfied by grants of the lands actually cultivated for them and the common people with such plots as they cared to work, that the words addressed to the original missionaries were fulfilled and that "very much land yet remained to be possessed." The missionaries suggested that this should be disposed of for the common benefit, and the suggestion was accepted by the still docile chiefs. Mr. Richards undertook to arrange the disposal. Dr. Judd took his place as Minister of Instruction and Mr. Richards went to Europe to obtain recognition from the various governments for the new constitutional kingdom and incidentally to make profitable disposition of the waste lands. The worthy ex-minister had already in

1841 made a contract with an American business firm—Ladd & Co. —giving them the right to lease any unoccupied lands at a nominal rent. He became a partner in the firm at the same time. On his European trip he organized a larger concern—the Royal Belgian Company—to which the concession of Ladd & Co. was transferred. In his zeal for the welfare of the new government, he considerably enlarged the privileges of the new company, so much so indeed that the foreign trade of the islands appeared to have been made a monopoly for its benefit. Its rights had ultimately to be bought out by the Hawaiian Government. Mr. Richards, it may be added, was one of the directors of the Royal Belgian Company. "Very much land yet remained to be occupied."

Coined money had become a necessity for the new government, and it was coming in from the port dues and similar charges. The native lack of business training of course prevented the chiefs from knowing how to handle these revenues in civilized manner. Accordingly Dr. Judd, a medical missionary, was appointed Treasurer in 1846. Courts to settle the land titles were also found desirable and established in 1847. An American lawyer, devoted to the missionaries, happened fortunately to land about this time, and on missionary recommendation he was made Chief Justice. Another American became Attorney General and the form of a civilized government was rounded off by a Foreign Minister. A Scotchman, Mr. Wylie, received the last office. He was regarded as a true friend to the missionaries, but some remarks in Dr. Anderson's pages suggest that there was over much "canniness" in his Scotch nature. He subsequently induced Kamehameha IV. to set up an English High Church Bishop in Honolulu and declare himself an Episcopalian, to the deep disgust of the Congregational body.

While the missionaries were thus engaged in building up constitutional monarchy in Hawaii its people were wasting away. Their numbers dropped from 130,000 in 1830 to 108,000 in 1836, and to 84,000 in 1850. Forty years later they had dwindled to thirty-eight thousand. This unfortunate state of affairs began to cause grave doubts of the glowing statements regularly sent to America of the religious progresss of the mission. Dr. Anderson mentions these criticisms and avoids any definite answer. "Whether the people might be represented as nationally christianized," he declares, "was hard to say. There was no well defined opinion in the Christian mind at home as to what constitutes a national conversion." After this remarkable statement of the intelligent zeal which had furnished funds for the "conversion" of the South Sea heathens he puts in his own description of what had actually been done in the way of imparting Christianity to them.

"While we see more of the foreign element than could be desired in the government of the islands, we are permitted to regard it as an independent and constitutional government, with a native sovereign at its head, as confessedly cognizant of God's law and the Gospel as any in Christian Europe, and with a community of self-governing churches embracing as large a proportion of the population and as really entitled to the Christian name as the churches of the most highly favored countries."

There is a strange contrast between Dr. Anderson's modest statement of the work accomplished and the enthusiastic congratulations embodied in the address to the public of a committee of members of Congress presided over by no less a person than ex-President John Quincy Adams.

The apparent candor of the secretary of the American Board of Foreign Missions was not without due motive. That body had been collecting large sums from the liberality of the Protestant public in return for the mission work done under its auspices. Over twelve hundred thousand dollars, we are told, was expended on the Hawaiian mission between 1819 and 1863. Conversion of heathens by modern methods is an expensive matter. There were twenty-seven ordained ministers and sixty American mission helpers laboring on the sunny shores of the Pacific islands in 1837. As the whole number of natives enrolled as Christians at any time scarcely reached eighteen thousand, it would seem that the labors of the missionaries can hardly have been excessive. Their remarkable longevity and the rapid growth of their families amid the decay of the native population point to the same conclusion. The latter circumstance, indeed, was freqently described in the Board reports as a special mark of the blessing of heaven on the great work. Some occurrences in 1848 induced a modification of this judgment. The children of missionaries in the islands had grown to a hundred and thirty by that year. Their parents began to think it might be well to bring a number of them home for education as the moral surroundings in the new Protestant Paraguay were decidedly unfavorable to their Christian training. Five missionaries, with twenty-five children, applied to the American Board to bring themselves and their families home and provide for them in America according to contract. Twelve more missionary families were ready to make the same demand the following year, and others would quickly follow. In fact, as Dr. Anderson tells us, "the prudential committee" found it likely that the mission would be abandoned by all its teachers within a few years if the latter could only get provision made for them at home as they expected. The alarms excited by this untoward prospect were appalling. Provision for twenty-five missionary families on a

style suitable to their requirements was a burden beyond the resources of the Board. It would also be strange to the public to learn that the mission which had been described as the triumph of modern evangelical methods should be left without even a pastor. The prudential committee declined to endorse the request of the five tired missionaries. They parleyed and inquired, and the historian tells us the results.

It would seem to ordinary eyes that it should be an easy task to find zealous teachers among American Protestants to take the place of the men whose success had been so remarkable. Such, however, was not the case. The old missionaries did not encourage any extension of the foreign element in the islands outside their own. They had secured most of the important offices and land concessions already, and they plainly stated that increase in the foreign element was not desirable. A native clergy might have been expected after twenty-five years of conversion such as had been pictured already, but on inquiry it appeared that the Christianity of the natives had not warranted the admission of any of them to the Protestant ministry. The converts went and came to church, as the government ordered, but seemed lacking in intelligent appreciation of any doctrines. It seems that of a total of fifty thousand converts who had been received as church members up to 1863 there were only eighteen thousand then left, or about a quarter of the actual population. As many more had died, for the longevity of the American teachers, some way, did not extend to their flocks. The others had dropped all semblance of connection with Protestant churches. In fact, though Dr. Anderson declines to admit it, a large number had become members of the long persecuted Catholic Church.

The moral effect of the modern mission methods on the natives is one of the strangest facts brought out by the discussion of the pension question for missionaries. Dr. Anderson acknowledges that the population was steadily declining and that its decline was caused by unrestrained licentiousness and disease introduced by the first English visitors. That the kind of teaching the missionaries had given had little effect in bringing in a higher morality than the old pagan one he admits, but he finds consolation in the assurance that if it had not been for the mission there would have been no natives whatever left in existence. "Something" had been done, he asserts, towards moral reformation, and he quotes a Rev. Dr. Gulick for the assertion that "female virtue was not unknown in Hawaii" after forty years of mission work. He turns from the unpleasant subject, however, with this brief testimony to vindicate the glories of mission work: "The nation may, and probably will, fade away. It will be forever true that the Sandwich Islands were Christianized by

evangelical mission from the United States, and that as a consequence the people *were recognized as entitled to the rank and privileges of a civilized nation.*" Such is the highest claim put forward by its chief promoters for the modern mission of Hawaii.

It was hardly to attain such results that the old Anglo-Saxon Catholic missioners had labored in the forests of Germany or among the Vikings of Scandinavia. Boniface and the Ewalds did not lay their lives down that their converts might be "recognized as a civilized nation" and then perish from the effects of that civilization. Patrick did not win the Irish people to Christ that they might "fade away" from among the nations, nor did the Celtic Columbkill, the Polish Hyacinth, the Spanish Xavier or the French Brebœuf. Christianity is of no land or race. Its methods of propagation were given by the Redeemer in full perfection in Palestine nineteen hundred years ago, and they have been carried out by Catholic teachers during each succeeding century. If in pride of temporary power any nation attempts the task of Christian mission work on its own worldly methods the result will be the same as that of the American mission of Hawaii.

The material results of the mission in the shape of buildings and revenues were fully discussed by the prudential committee with the missionaries abroad. Churches were numerous, as they had been built with native labor imposed by the chiefs during the predominance of missionary influence. In 1870 the Protestant churches numbered a hundred and twenty for a membership of fifteen thousand. Dr. Anderson admits that they were far too numerous for the wants of the population. The missionary teachers had not forgotten the thrift which levied the price of the early tracts on the native recipients. Assessments for church uses were levied on the native converts to the full amount of their resources. Exclusive of labor and produce eighteen thousand dollars in gold was thus collected in 1848. It had been raised to thirty-one thousand dollars, rather more than two dollars a head, as Dr. Anderson triumphantly declares, in 1870. In the Philippines three years ago ten cents a head represented the cost of church and clergy to the natives, and thirteen hundred priests were laboring under a tropical sun on an average income of less than three hundred dollars each. Twenty times that amount was paid by the Hawaiian Protestant converts, but it was found insufficient to attract missionary successors to fill the places of their first instructors. The needs of missionaries of the modern "Anglo-Saxon" school are indeed different from those of Catholic friars. "A clerical missioner will do more towards promoting civilization by a well cultivated garden, a neat house, decent furniture and becoming clothing than fifty artisans." Such was the

sage recommendation of an English missionary deputation from Tahiti to the American Board in the beginnings of the Hawaiian mission. The Board was now finding by experience that such methods were a costly luxury, and it began to doubt the expediency of paying for them much longer.

Under these circumstances the prudence of ordaining natives as ministers was recognized by the white missionaries who were desirous of release from their functions. The first was ordained in 1849, and within twenty years later the number reached thirty-seven. Only eight white ministers then remained, and of the numerous missionary families but two had taken to the ministry. The others found more wealth in business pursuits and politics and were looked on with high favor in evangelical circles at home. The "missionary party" in Hawaii continued to hold its name long after the official close of the mission. How its members finally overthrew, by conspiracy with an unprincipled foreign Minister, the "civilized native government," the establishment of which, as Dr. Anderson states, was the one result of the Protestant mission, is an unpleasant historical episode of our own day. Its discussion would prolong this article beyond the limits of this essay.

The prudential committee of the American Board of Foreign Missions, on mature consideration, declined to bring home the missionary families. As a compromise it agreed to divide the property owned by the Board in the islands among the missionary residents. It further promised to continue salaries for some time to such as were not already "provided with adequate incomes from glebe lands, private property or the revenues of the native churches." Tentative attempts were made to group the latter into bunches with white pastors drawing salaries adequate to their dignity and native assistants doing the greater part of the work at stipends proportioned to native life; but these, as Dr. Anderson tells, "met only partial success." Thirty thousand dollars a year was no revenue to support a civilized modern clergy for fifteen thousand Hawaiians. Civilized labor is dearer in the tropics than in temperate climates, and the Board and the missionaries agreed that in the future the care of Hawaiian souls had better be left to the cheaper native pastors.

The original missionaries, however, were not left to absolute want. Kamehameha III. was pretty effectually controlled by ex-missionary ministers, and the public funds were drawn on freely to help out the donations of the American Board. There was a Protestant seminary at Lahamalula since 1844. The native government was got to take it over in the sense of providing funds for its support, while its control was vested in a self-filling Board of Trustees appointed by the

missionaries. A similar arrangement was made for the school for the children of the missionaries themselves. It became the Oahu College, with a liberal grant of valuable land to its trustees. A couple of other mission schools for natives were turned into private boarding schools, from which pure natives were excluded. These provided for a few more missionaries comparatively well. The royal school for natives was given up, but its missionary teacher, Rev. Mr. Cooke, engaged in business in Honolulu with another clergyman, the Rev. Mr. Castle. Both acquired sufficient wealth to take away any desire they might have had of returning to New England.

Though the risk of a wholesale return of missionaries was thus averted, the American Board felt anxious to get clear of its connection with Hawaii. They merely wished to retire with credit before the extinction of the nation, and they urged the establishment of a Hawaiian Board to attend to the spiritual interests of the islands in the meantime. They even advised that Hawaiian should be substituted for English as the official language of the mission and hinted, not obscurely, that prudence counseled the policy of leaving the natives to manage their own religion for the future. The missionaries in the islands acquiesced as they, too, found more tempting fields of work than preaching to natives. They had a new Constitution framed on stricter legal lines than the original semi-Scriptural document of the seminary pupils which had done duty for twelve years. Chief Justice Lee and two assistants prepared this document, which specially insisted on the rights of Cabinet officers in legislation in a constitutional kingdom. It may be noted that these gentlemen were Americans whose knowledge of monarchical institutions was theoretical. The document, however, was signed by the King as easily as the former. A large slice of the lands originally reserved as his private domain was also turned over to public use. A Rev. Mr. Armstrong entered the Cabinet as Minister of Instruction, and during the rest of Kamehameha III.'s reign the Ministry was wholly composed of foreign missionaries or their adherents.

On the death of Kamehameha III. his successor, who had been educated in the establishment of the Rev. Mr. Cooke, showed symptoms of restlessness under the missionary régime. Possibly the scanty fare of that Hawaiian Dotheboys' Hall had some part in his change of mind. A large defalcation was found in the Treasury, and three missionary ministers were required to resign in consequence. This incident is not mentioned in Dr. Anderson's history.

The New England Missionary Board, in view of this state of af-

fairs, had to continue its direction of Hawaiian Protestant church affairs till 1863. It did so reluctantly. The prudential committee endeavored to find a way to get out of the charge ten years earlier with some show of spiritual credit. Dr. Anderson says that in 1853 they "ventured on a somewhat jubilant announcement that the Sandwich Islands had been Christianized," but he adds "the fact does not seem to have been generally credited by the Board itself." Ten years later, during the excitement of the Civil War, the Board decided to take the establishment of a civilized native monarchy as sufficient proof that the mission work was completed. It felt that at all events it could do no more in the line of conversion and that it had exhausted the resources of the Anglo-Saxon civilization in that direction. A Hawaiian Board took full charge of the religious interests of the native population, and the New England mission was officially ended. Just thirty years later a faction of children of missionaries overthrew, by conspiracy with the Minister of a foreign power and the help of a foreign war vessel, the native civilized government. Mr. Dole, the son of a missionary teacher, was installed as President for life. The remnant of lands left to the native Kings was seized by force and the last native Queen sentenced to five years' imprisonment at hard labor for refusing obedience to the usurpers. Such was the end of the mission's work.

The methods adopted by the Protestant missionaries in Hawaii are identical with those of nearly every Protestant mission among the natives of the Pacific islands. In New Zealand, in Tonga, the Society Islands, Fiji and every other group which has been subjected to Protestant influence similar methods have been employed, and the result has been the same. The disappearance of the native population and the occupation of their lands by the missionaries and their families as rulers has followed as the result of Protestant philanthropy. It is worthy of serious reflection that in the islands where Catholic teachers were accepted, and in those alone, the native population has not decayed. Wallis, Futuna and the Gambier Islands are peopled by the same race as Hawaii. They have become Christian, and they have steadily increased in population since. The Philippines when Legaspi visited them in 1568 were estimated to have a population of about half a million. Hawaii when Cook brought it first under the notice of English civilization was credited with nearly four hundred thousand. To-day it has less than forty thousand of the native race. The Filipino Catholics number over seven millions. The facts are indisputable and speak for themselves.

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San Francisco, Cal.

IL DIALOGO DI GALILEO GALILEI LINCEO.

I.

WE feel that some apology is due to our readers for inviting their attention to a subject that has been so much discussed and so warmly controverted as the action of the Congregations of the Index and the Inquisition with regard to Galileo; but the fact is that, whether we desire it or not, it is revived at intervals, sometimes by hostile or perhaps even friendly critics, sometimes by biographers or scientific writers; so that we venture to think it a matter of importance that Catholics should be acquainted at least with the principal facts of the case, as also with the force and bearing of the decisions of the Roman Congregations on the Copernican theory of astronomy and its supposed antagonism to Holy Scripture.

But a further apology may be expected from the present writer, because in a little work published in London some years ago, and bearing the title of "Galileo and His Judges," he endeavored to state briefly but sufficiently the circumstances that occurred, and also to deal with the false inferences drawn from them by opponents of the Church and other misguided persons. It may therefore be considered questionable taste on his part to revert to the subject; but (as has been just explained) it is not unfrequently revived by others, new objections being made, or old ones re-stated; whilst, on the other side, fresh information has been acquired; and, last but not least, some little modification of the argument formerly used has appeared desirable.*

Under these circumstances it has been impossible to avoid repeating here, though in a condensed form, a great part of the narrative as given in the work just mentioned; and this also applies to the abbreviated précis of the celebrated Dialogue, a fuller abstract of which is to be found in the same work. The author of this article must therefore throw himself on the mercy of his readers, and beg them to pardon such unavoidable repetitions, and to excuse the apparent egotism (unintentional let him assure them) of referring to his own previous writings. He may take this opportunity of remarking

[1]The apology of the writer is probably not so much required for American readers, because he is not so presumptuous as to think that his work, published in England, has ever had any appreciable circulation on the far side of the Atlantic.

that his treatment of the decisions of the Roman Congregations is different from that adopted by some Catholic apologists; but, relying on the opinions received from very able theologians, he feels confident that such treatment is in full accordance with Catholic principles and with the spirit of dutiful obedience to the Holy See.

With this explanatory preface, we now proceed to the questions which appear to us the most important to answer.

The attack on the Catholic Church by those who use the Galileo case as a weapon may be stated thus: The Congregation of the Index in the year 1616 prohibited and condemned a printed letter by a Carmelite Father Paul Anthony Foscarini, in which "the said Father endeavours to show that the aforesaid doctrine of the immobility of the Sun in the centre of the Universe and the mobility of the Earth is consonant to the truth, and is not opposed to Holy Scripture," and also prohibited "*all other books* teaching the same thing." The "aforesaid doctrine" referred to what the Sacred Congregation termed "that false Pythagorean doctrine, altogether contrary to Holy Scripture, concerning the movement of the Earth and the immobility of the Sun taught by Nicolas Copernicus, etc., . . . already spread about and received by many persons," and the object of the decree was "lest any opinion of this kind insinuate itself to the detriment of Catholic truth." This decree, though not officially stated to have been approved by the Pope (Paul V.), undoubtedly received his approval: in fact, before the promulgation of the decree the Pope had desired Cardinal Bellarmine to send for Galileo and admonish him to abandon the opinion in question and no longer to teach it, which admonition, it seems, he promised to obey.

This action on the part of the Congregation of the Index is, of course, not all. The indictment against Rome is also founded on the proceedings taken by the Inquisition in 1633 against Galileo on account of the publication of his famous Dialogue; and this in fact is the chief thing that has taken hold of the popular imagination (so far as the popular imagination takes in the subject at all), and this again partly arises from the theatrical story, not based on fact, of the old philosopher stamping his foot on the earth and saying, "E pur si muove," after his enforced abjuration of the Copernican theory.

It is also alleged that a Bull of Alexander VII., published in 1664, and authorizing a new Index in the place of the old one, gave a special sanction to the former decree prohibiting all works teaching the Copernican theory, because it includes that decree amongst many others, and also the monitum of 1620 ordering certain corrections in the work of Copernicus, and containing in its preamble a statement that the principles of Copernicus relating to the move-

ment of the Earth were contrary to the true and Catholic interpretation of Holy Scripture; as also all works teaching the movement of the Earth and the immobility of the Sun.

Before proceeding to answer these arguments, it may be well to give a brief sketch of the life and character of Galileo, or Galileo Galilei Linceo, to give him his name in full. He was born at Pisa in 1564, and after studying mathematics and physical science at the University of that place, he came to Florence, when about 21 years of age, in order to go through a mathematical course. Though the greater part of his life was irreproachable, it appears that while still very young he fell into sin and formed an illicit attachment to a lady named Maria Gamba, and lived with her a few years, having three children by her; but this *liaison* did not last very long, and a separation took place, after which he saw her no more. He then entered the monastery of Vallombrosa, but left it before his novitiate was completed, having no vocation for the religious state. At the age of 25 he was appointed professor of mathematics at Pisa, and it seems that it was at that time that he first excited hostility by attacking the doctrines of Aristotle on physical sciences. He had also heard of the invention of the telescope, then recently constructed for the first time in Holland or Belgium; and from what he had heard or read he contrived to make a telescope for himself, of a very simple kind, no longer in use for telescopes, though the principle of it is identical with that of binocular field glasses and other similar instruments. Simple, however, as it was, it was sufficient to reveal to a careful observer phenomena hitherto unknown. Galileo was able by this means to discover the satellites of Jupiter (that is four of them, for the fifth has been only discovered quite recently); also the moon-like phases of the planet Venus; the rings of Saturn, and the spots on the Sun; these last having been observed about the same time by the Jesuit Father Scheiner, and by Fabricius. He does not, however, appear to have published the results of his labors until the year 1610, when his work called "Nuntius Siderius" was printed. In 1611 he went to Rome and was well received by the Pope and by other eminent prelates; in 1612 he published another work entitled "Discorso sui Gallegianti;" and so far he met with general approval, notwithstanding a certain amount of opposition. In the year 1613 he brought out another work at Rome, called "L'Istoria e Dimonstrazione intorno alle Macchie Solari," in which he drew a conclusion in favor of the revolution of the Earth on its axis. Even this was generally well received, and Galileo might have escaped censure had he not allowed himself to be drawn into another question—the reconciling the Copernican theory with the interpretation of Holy Scripture. Prudence and reticence do not

seem to have been features in Galileo's character; the temptation, we must allow, to embark in this part of the controversy was doubtless great, and the provocation considerable. It was not he, but his opponents, who began the argument from Scripture; and when Father Cassini, a Dominican, made an attack on the Copernican theory from the pulpit of the Church of Sta. Maria Novella at Florence, instead of leaving the Scriptural difficulty to be argued by theologians, he wrote a letter, an imprudent and unguarded letter apparently, to Father Castelli, a Benedictine monk, in reply to the Dominican preacher. The result was that his letter was denounced to the Cardinal Prefect of the Index. No actual steps were, however, taken until two or three years after the publication of the letter, but in the year 1615 a process was commenced, which finally led to the decree of the Congregation of the Index, to which we have already alluded. Galileo unfortunately could not be persuaded even then to keep himself quiet; he came to Rome, mixed in society and argued his case to the best of his power. This conduct gave offense in high quarters and the Pope was evidently displeased. The result was that in February, 1616, two propositions, supposed to deserve censure, were referred to the "Qualificators," as they are termed, of the Holy Office—theologians attached to the Congregation of the Inquisition, but of less position and dignity than the "Consultors."

The propositions were: First, That the Sun was the centre of the world and consequently immovable locally. Second, That the Earth was not the centre of the world, nor immovable, but moved round itself by a diurnal rotation. The Qualificators pronounced the first opinion to be foolish and absurd, philosophically speaking, and also formally heretical, as it contradicted Holy Scripture according to the proper meaning of the words, and the ordinary interpretation, and the sense admitted by the Fathers and others. They also pronounced the second opinion to be deserving of the same censure philosophically, and, regarding theological truth, to be at least erroneous in point of faith. It seems to us indeed strange that learned men should even at that date, nearly 300 years ago, have committed themselves to these opinions; but we must bear in mind the fact that astronomy (as we now understand it) was then in its infancy, and can scarcely be said to have attained to its maturity until the great discovery of the law of universal gravitation, about half a century later. We need not, however, pause to discuss the opinions of the Qualificators, for although they had a good deal of influence on the subsequent proceedings, they are simply to be taken for what they are worth—the judgment of certain grave and learned theologians—and have no official weight. But they had this consequence, that the Pope desired Cardinal Bellarmine to send for

Galileo and admonish him to abandon the obnoxious opinion; if he refused to obey, he was to be solemnly warned and commanded to abstain from teaching such doctrines, and from defending them, or treating of them. In case of his non-acquiescence, he was to be imprisoned. Galileo, however, promised to obey.

Shortly afterwards there appeared the printed decree of the Index of which we have already spoken. It is noteworthy that no work of Galileo's was mentioned by name, though *all books* teaching that the doctrine of the immobility of the Sun in the centre of the Universe and the mobility of the Earth was in accordance with Holy Scripture, were forbidden. Galileo had influential friends in Rome, and there was probably a disposition to spare him personally, provided the much dreaded Copernican theory could be stamped out. How different the final events were we need not point out; but that this feeling existed in high quarters at that time is evident, for in March, 1616, the month following the publication of the decree of the Index, Galileo had an audience of the Pope, in which he assured him of the rectitude of his intentions, and complained of the persecutions of his antagonists. Paul V., it is stated, answered very kindly, saying that both he himself and the Cardinals of the Index had formed a high personal opinion of him, and did not believe his calumniators.

On the death of the Pope, about six years after these events, Cardinal Barberini was elected as his successor, taking the name of Urban VIII. The new Pope had always been friendly to Galileo, and on the occasion of his visit to Rome in 1624 received him and treated him with very great consideration. It seems, in fact, that Urban VIII. had several conversations with him and discussed the Copernican theory, and in doing so employed some of those arguments which the imprudent philosopher afterwards put into the mouth of Simplicio, a character in the ill-fated Dialogue, thereby causing great offense to the Pope. There was clearly a partial reaction in Galileo's favor at that period; he had published a work since the decree of the Index, entitled "Il Saggiatore," in which he had favored the theory of the Earth's motion; an attempt was made to have the work prohibited, or corrected, but this attempt was a failure. Some reputed conversations of Urban VIII., of a private and non-official character, point in the same direction. For instance, he is reported to have said on being told that certain Germans were ready to become Catholics, but hesitated on account of the condemnation of Copernicus, that this was not his intention, and if he had had the arrangement of matters the decree would never have been made. Galileo somewhat overrated the effect of the reaction, such as it was, and as time went on he thought he might

safely publish the Dialogue on which he had been laboring. He came to Rome in 1630, and had a long audience of the Pope, who treated him very kindly and even increased a pension he had already bestowed on him. He also saw Father Riccardi, who had become Master of the Sacred Palace—the holder of which important position was then, and still is, the official censor of books—and desired from him the authority to print his book. The following circumstances deserve special notice because they throw some light on the strange fact that the Dialogue bore on the face of it the Ecclesiastical permission to publish it, and that it was nevertheless afterwards prohibited and its author severely censured.

Father Visconti, who was a professor of mathematics, had been engaged to read the work, and he reported that there were some passages in it that required correction, and many points that he would like to discuss with the author. Still, the Master of the Sacred Palace gave leave for the printing of the work, stating at the same time a wish to see it once again himself; so it was arranged that Galileo should return to Rome in the autumn in order to add the preface and to insert in the body of the work certain additions calculated to show that the question of Copernicanism was treated purely as a hypothesis. But owing to some untoward events, and particularly an outbreak of the plague at Florence, delays and mistakes occurred.

It was arranged that the Dialogue should be duly revised by the proper ecclesiastical authorities at Florence, and should then be printed there. After some further delays on both sides the Inquisitor of Florence received from Rome the power to approve officially the copy of Galileo's work that would be submitted to him; but some instructions were added by Father Riccardi that the wishes of the Pope must be borne in mind as to certain points. The title of the work must indicate that it dealt only with the mathematical question connected with Copernicanism, and also that the Copernican opinion must not be put forward as a positive truth, but only as a hypothesis, and this without alluding to the interpretation of Scripture; moreover, that it should be stated that the work was written to show that when the decree of 1616 was made at Rome the authorities were not ignorant of the reasons on the other side. The preface as it stands embodies these very ideas, and certainly reads as if it were a piece of bitter irony; but we do not know how much was written by Father Riccardi and how much by Galileo; it was probably their joint composition. Galileo proceeds to state that for the purpose in hand he had taken the Copernican part in the Dialogue as a pure mathematical hypothesis, but endeavoring to represent it as superior to the doctrine as defended by the Peri-

patetics, to whom he alludes with some contempt—an imprudent thing to do, considering how strong that party—the party who put their implicit trust in Aristotle—was in Rome at that time. We do not propose to give here a full précis of the famous Dialogue; if we may be permitted without presumption to say so, it will be found in the work to which we have already alluded, "Galileo and His Judges." We may, however, give a brief explanation of its structure and its contents. There are three interlocutors—Salviati, Sagredo and Simplicio; they are supposed to meet at Venice at the palazzo of Sagredo. The best arguments are put into the mouth of Salviati, a mathematician and a man of science. Simplicio sustains the anti-Copernican side; the name was an unfortunate one to choose for him, for it was obviously not meant as a compliment, and is supposed to have given great offense to Urban VIII., since (as remarked above) he had used in arguing with Galileo some of the same reasons that are put into the mouth of Simplicio: so at least the story goes, and it does seem probable that the Pope was persuaded to think that some grave disrespect to himself was implied by this circumstance. Nevertheless, Simplicio, though he is made to say certain unwise things, is not by any means a simpleton in our sense of the word; he is a follower of Aristotle, whom he constantly quotes, and is a type of the school of the Peripatetics (as they were called), slightly caricatured perhaps in this way by our philosopher, who had little respect for them. It seems, however, incredible that he should have intended to insult the Pope, whom he had every reason to conciliate, and who had long been kindly and amicably disposed towards him.

The Dialogue is divided into four parts, one part to each day. The second and third days are the best, and contain the ablest arguments which the astronomical knowledge of that time allowed of for the Copernican system. Thus Salviati urges forcibly the improbability of the motion of the whole celestial sphere, including such a number of vast bodies, revolving with an immense velocity round the earth in 24 hours; whilst the earth turning round on itself would produce the same effect. This argument, good and sound even then, is still more cogent now that we know something of the distances of the heavenly bodies; for Galileo did not know the distance or the size of the Sun, the former of which he estimated at 1,208 semi-diameters of the Earth, which would be rather more than 4,800,000 miles, about one-nineteenth part of the true distance; and when we consider the stars, the nearest of which (so far as we know) is so far from us that light, traveling as it does with a speed that has been estimated at 186,000 miles in a second, takes nearly four years to reach the Earth from the Star Alpha Centauri, what was at the

date of the Dialogue violently improbable appears now simply incredible and almost impossible. But it took some time to disabuse men's minds of the antiquated opinion, founded on ideas which prevailed before the invention of the telescope, that the stars and planets were set in vast movable spheres, as lamps might be set in a revolving cupola. One of the favorite reasons which the adherents of the old system employed against the revolution of the Earth on its axis was that the Earth if it so revolved would leave the air behind it. Galileo was doubtless aware that the Earth could carry the air round with it in its diurnal rotation; but as far as we can judge from the Dialogue, he did not clearly understand the true reason, namely, the *gravity* of the air. He had not freed himself from the old but mistaken notion that some bodies were *essentially* heavy and others light, the latter having no tendency to descend; whereas we now know that all bodies are subject to the action of gravity, and that the light bodies are so only in a comparative sense; he, in fact, had but an imperfect knowledge of gravity, though he recognized it as a mysterious force drawing heavy bodies towards the centre of the earth; and in one remarkable passage of the Dialogue he appears to have half suspected that this same force controlled the moon in its revolution round the Earth; which great truth, if he had really and fully known, he would have anticipated the important discovery of Newton. It is, however, probable that he became aware of the gravity of the air later on, for he lived some ten or twelve years after writing this work, and his mind was never in a state of stagnation, but open to the acquirement of fresh scientific knowledge. And yet it is curious that when he wrote the Dialogue he adhered to the mistaken opinion that the heavenly bodies move in circles, though Kepler's work containing the theory (now so well established) of their motion in elliptical orbits, was published some years before the printing of the Dialogue. We may add that the common opinion of the philosophers of the Copernican school of that age was that the adherence of the atmosphere to the Earth as it revolved was the effect of friction. An instance, we may observe, can be found in the Dialogue showing that whatever the author's guesses or suspicions were as to the force and nature of gravity, he was far from comprehending the true doctrine as afterwards propounded by Newton; he puts into the mouth of Salviati the argument that bodies which emit light, as the Sun and Stars do, are essentially different from those which, like the Earth and the planets, have no such property; and that the Earth in this respect resembles the planets which are undoubtedly moving, and is therefore probably also itself in motion, whilst the Sun and Stars remain at rest.

Ideas such as these, plausible though they seemed at that time, are entirely contrary to the theory of universal gravitation, according

to which the luminosity and opaqueness of any two heavenly bodies have nothing whatever to do with their relative motion, which latter depends entirely on their respective *masses.* But Galileo, though he had not arrived at the knowledge of this great scientific truth, could explain ably and powerfully by the medium of this same Salviati the grounds for believing the Sun and not the Earth to be the centre of revolution. He takes it as certain that the two planets Mercury and Venus revolve round the Sun, the phases of Venus, which he had himself observed, showing it to be the case with regard to that planet, and the fact that neither of the two is ever seen far apart from the Sun, strengthening the conclusion as to both of them. Then, that being so, he shows what strong ground there is for inferring that the superior planets Mars, Jupiter and Saturn (the only ones then known) revolve also round the Sun; their greater apparent size, particularly that of Mars, when on the opposite side of the Earth from the Sun, clearly pointing to this conclusion and proving that the Earth is not the centre of their orbits. He also explains how the telescope revealed phenomena such as the phases of Venus, which were unknown to Copernicus. Simplicio, as we might well conjecture, has had no confidence hitherto in this new instrument, and following his friends, the Peripatetic philsophers, has supposed the appearance to be optical illusions; he is, however, willing to be corrected if in error.

To the objection that the Earth could not be well imagined to move round the Sun accompanied by the Moon, Salviati replies that Jupiter does so, accompanied by four moons.

Simplicio, however, does bring forward one weighty objection to the Copernican system, namely, that if the Earth really makes an annual revolution round the Sun, the fixed Stars, viewed as they would be at different seasons of the year from points so widely distant, would be naturally expected to change their apparent positions in the heavens. At a time when the real distances of the heavenly bodies were not known, that was a formidable difficulty, and if it had been understood that the diameter of the Earth's orbit was about 185,000,000 miles in length, it would have been more formidable still. Galileo's reply (through Salviati) is nevertheless sound and correct in principle, though founded on inaccurate data, and amounts to this, that the distance of the stars is so great, that the change of position caused by the Earth's annual motion round the Sun is not appreciable. This was rigidly true so far as all instruments then available were concerned; but the modern answer to the difficulty would be somewhat different; the greatly improved instruments now in use have shown that a certain number of the Stars do actually undergo a minute displacement every year, or in the lan-

guage of astronomy have an *annual parallax*, while as to the great bulk of the Stars the same answer as that given by Salviati still applies.

Some pains are taken in the course of the Dialogue to explain how the Stars in their different positions would be affected by annual parallax, if it existed, and supposing it to be discoverable. And a minute explanation is also given, on the assumption of the Earth's motion, of the variation of the length of day and night in different latitudes according to the seasons; these familiar details (as they now appear to us) being strange to the minds even of learned men in those days.

The last day's Dialogue is mainly devoted to the argument drawn from the tides, and we need not dwell at any length on this, as it is well known to be erroneous. Galileo would have been wise if he had never touched upon a matter of which he had very little practical knowledge and of which he did not understand the theory. There was, nevertheless, some ingenuity in his idea, and any one who is interested in such matters will find it explained in the précis of the Dialogue, already mentioned, if they think it worth the trouble to refer to it. We may say briefly that his suggestion was that as the Earth has two motions, one round its own axis in 24 hours and the other round the Sun in one year, that part of the surface of the globe which is turned away from the Sun moves through space more rapidly than the part which by means of the diurnal revolution is turned in the contrary direction; and so the sea lying in its vast basin gets a check or a jerk as it passes from one rate of velocity to the other. Galileo had not learnt (as he would if he had lived for a time at some place on our own coasts) that the tides follow the *lunar* day rather than the solar one, and it is remarkable that a man who was better acquainted with mechanics and the laws of motion than almost any man of his age should have failed to perceive that the ocean could undergo no such jerk or check as supposed, but must be carried round in the daily rotation of the Earth (unless interfered with by the attraction of other bodies) with an uniform velocity. Simplicio is justified in putting (as he does) the difficulty that if the sea behaved in the way suggested, the air would do so on the same principle; the reply to which is that the air being thin and light is less adherent to the Earth than the water, which is heavier and so does not follow the Earth's movements in the same way; also that where it is not hemmed in, as it were, by mountains and other obstacles, it really is partially left behind in the daily rotation, so that in the neighborhood of the tropics a constant wind blows from east to west.

Our philosopher had evidently heard of the trade winds, but

had not acquired an accurate knowledge of their course and origin. We have, however, now said enough of this mistaken argument connected with the tides, and we may add that it is not the only mistake in the treatment of the subject, as we have already seen. But notwithstanding all this, we have also seen that some very sound and cogent reasons in favor of the Copernican theory were urged in the Dialogue—reasons as valid now as they were then, though they have been supplemented by others, drawn from subsequent discoveries and especially that of the law of universal gravitation.

But it must be admitted that Galileo failed in one respect: if a disputed theory is to be handled in this way and to be argued out under the form of a dialogue, the case on both sides ought to be stated fairly and fully. This, we fear, was not done in the present instance; for Simplicio, though by no means a fool, is yet a personage who makes a comparatively poor figure in a scientific argument. We pass over one or two interesting questions that are discussed between the three friends, as they do not bear directly on the great point at issue. And we may now explain that we have directed our readers' attention to the Dialogue, giving what we may perhaps venture to call an abridged précis of it, because it is not possible to form a correct judgment of Galileo's history and the treatment he underwent without some acquaintance with the work for which he was so severely censured. His great ability, his knowledge of mechanics and his grasp (as one remarkable passage indicates) of the principles of pure mathematics are conspicuous throughout the Dialogue, notwithstanding the mistakes to which we have alluded and others also, some of which arose out of the old Aristotelian philosophy, a philosophy not without influence over even his enlightened mind. We must also bear in mind that a dialogue, though a convenient form of argument in some respects, does not always give us a clear insight into the author's real convictions. You do not know for certain whether he agrees with any of the interlocutors; and in fact Galileo in his defense before the Inquisition practically assumes that he did not so agree. But it is obviously a good method of stating arguments *pro* and *con*, when the writer is one whose opinions are intended to be expressed in a tentative shape, and possibly our philosopher's mind was then in a state congenial to such expression; this, we think, is not inconsistent with the fact that he shows an evidently strong bias in favor of the Copernican theory. A strong bias towards a probable opinion is one thing; a clear conviction is another. The first was from a scientific point of view the natural state of mind for an observer of the heavens in the early part of the seventeenth century; the second is the attitude of the modern astronomer.

There have been writers who in their zeal to defend the action of

the Roman Congregations have expressed themselves as if Galileo had no substantial ground for his leaning to the Copernican doctrine, but almost entirely relied on the argument which he drew from the tides; but these writers have not studied the Dialogue or made themselves acquainted with its contents. It has been said that this mistaken argument was his favorite one. That may possibly be true, but it was not by any means his only one, as the Dialogue clearly proves; and indeed the man who was the first to use the telescope for astronomical purposes must have had better reasons than that of the tides for the conclusions he drew.

Some people appear to think that it was merely the discovery of the law of universal gravitation by Newton that overthrew the old system of astronomy. It is quite true that that great event threw a flood of light upon the subject and gave us a key to the motions of the heavenly bodies. Dr. Whewell in an eloquent passage in his "History of the Inductive Sciences" calls it "indisputably and incomparably the greatest scientific discovery ever made;" and that owing to it "astronomy passed at once from its boyhood to mature manhood." It is none the less true that the death warrant of the old systems of Ptolemy and Aristotle was in effect signed when the telescope was turned upon the heavens. The old system did not die at once; it took a long time to realize the lessons to be drawn from the discoveries of Galileo and others, for it was only the experts who could fully appreciate them; but the fact remains that when the telescope was invented Ptolemy was doomed.

To us, who are separated from the events of that period by an interval of rather more than two centuries and a half, it may seem strange and incomprehensible that such a work as Galileo's Dialogue should have given serious offense to the ecclesiastical authorities at Rome; for owing to the very fact of its being a dialogue, though the case for the Copernican theory was persuasively stated, no certain conclusion was drawn; and it had, moreover, received the official approbation of the Master of the Sacred Palace. But the disciples of the School of Aristotle were powerful at Rome, and they could not endure anything that tended to demolish the scientific infallibility of that ancient philosopher. It appears that Father Scheiner, writing to Gassendi, observed that Galileo had written "*Contra communem Peripateticorum sensum.*" Then there was also the strong current of theological opinion which regarded the Copernican doctrine as contrary to Scripture, an opinion grounded on the rigidly literal interpretation of certain texts. And there was, too, the unfortunate circumstance that the Pope had been persuaded that a personal affront was offered to him by putting arguments he had himself used into the mouth of "Simplicio."

So the agitation against the Dialogue was successful. The printing of the work was suspended by orders from the Master of the Sacred Palace; and the Inquisitor of Florence, by the command of the Pope, directed Galileo to present himself in Rome in order to explain his conduct.

F. R. WEGG-PROSSER.

London, England.

AS OTHERS SEE US.

AN Irishman writes this for English-speaking Catholics in the United States, who are mostly of Irish descent. I was not long since in a Canadian city, and a priest of Irish name, face and parentage was giving some facts, which seem strangely forgotten by some who think America *vs.* England still means freedom *vs.* slavery. Are we all quite sure we know what the facts are of this present world?

"American priests come over here," said this Canadian Catholic High School manager, "and they begin by pitying us, who, alas! say they, are under England, and in the hotbed of Orange intolerance. They do not live far away; the border is not far off; but they live very ignorant of their northern neighbors. They go home wiser, and certainly sadder. For what does a short visit teach them? That in Ontario their brethren tell them they have nothing to complain of. The American priests think of their flocks paying twice for schools, taxing themselves to support unsectarian, and therefore generally irreligious schools, and then paying for their own schools, which at least aim at not letting the young grow up ashamed of God and holiness. What is a greater matter? What does the Church think a greater matter? Well, under England's monarchy, in Ontario, as in Ireland, with modifications, as in a limited way in England itself, you give your education and you get government pay, the money of your own taxes as Catholics, and you pay not at all for any other schools. So that in Ireland the clergy can say education is practically 'denominational,' the parish priest is the manager of the school, and we are satisfied with the system at least. In England the Catholics have not given up one of their schools, having satisfied in every case the conditions of receiving grants from Her Majesty's Government. So our American priests return to a Republic—alas!—to receive no

cent for their schools, no matter how excellent in secular instruction, from the country that claims us all as free and equal. Then from the Republic across the ocean, from liberty, equality and fraternity, comes the same story, with French parents increasing in number, who to save their children from less godly and more vicious surroundings daily withdraw them in greater numbers from the non-Christian, or anti-Christian schools, which alone get all the grants, all the taxes.

As he takes up an Irish-American paper our priest will perhaps see a denunciation of England for withholding the grant from the Christian Brothers' successful schools in Ireland, because of their books not approved by the Board of Education, and the religious emblems of crucifix, holy picture and statue, which—thank God—the Brothers have not found it necessary to put away from the boys' sight all the week. But even these religious, together with Jesuits and all others, share largely, according to their great success, in the exhibitions and prizes given by the English Government for the higher education of boys.

But the protest of our Irish-American against the government in Ireland for intolerance in one case might be swelled into protests against the government in America in the whole system of secondary education.

Facts are facts. "Things are as they are; and their consequences will be what they will be"—one obvious consequence already being that Canadian clergy of Irish descent are becoming more and more blended with Englishism. Who will blame them? Why should they wish their people to be double taxed for schools? They protest, naturally, against a local injustice in Manitoba; but why should they wish injustice done to their people all over? That injustice they will find if they leave the English flag and join the American. We may storm about England's influence, against her imperial strength; we may scoff at Irishmen and Frenchmen who submit more and more cheerfully to her rule. Let us ask these Catholics, descendants of the persecuted and once themselves anti-English it may be, why it is that they thus submit.

Take French Canada. Here is an incident of last year. To Montreal came a religious from France and published an article in *La Semaine Religieuse*, calling upon his Canadian cousins to observe the great anti-Catholic power, England—as if the good monk had just awakened from a sleep of 150 years, when Protestant England fought with Catholic France—to observe how this England was tormenting and torturing the Catholics of Manitoba, and how French Catholics must watch their moment; must long for the day of retribution or vengeance, and must pray for the downfall of England as

the enemy of God's Church. And this from a French monk, a monk from France, where laws worthy of England's old penal laws have been passed in this generation, whence a few years ago French monks poured once more into England to find there freedom to set up their monasteries how and where they would and to educate Catholic children without paying for the education of non-Catholics. Hear it, O Americans, O Irish-Americans, who remember when your fathers were paying tithes to the Protestant ministers to support services you could not go to, though in your own old churches, abbeys or cathedrals. That was hard, that was unjust; but what they did for the non-Catholic minister under England before she mended her ways, are not you doing now under America, America of to-day, for the non-Catholic schoolmaster?

It is true England still has rascally laws on the statute book—against the religious and their holy habit. Nor are these all a dead letter, as when lately the Irish Chancellor declared to a Jesuit novice of wealth that he was joining an illegal society. Still, England pays her money—or her Irish subjects' money—to Jesuit schools that do good work. It is true also that she keeps some of her high offices insultingly closed to Catholics, while she preaches that she gives equal rights to all. Worse than that, the sovereigns take a brutal and blasphemous oath against the faith of St. Augustine and Alfred, St. Thomas and Henry the Fifth, Queen Katherine and Queen Mary. Our Presidents do not so. But what sort of ignorant no-Popery do we find they sometimes listen to? And ask the praiser of free and equal America whether he in his millions will vote for every seventh President a Catholic; or say every seventieth, lest he say we would be having a man elected for his religion merely.

No-Popery! Why, in many respects our average American that makes a stir in the world, business man, politician, journalist, essayist, professor or poet, is fifty years behind the English. With his A. P. A., and his "famous" preachers, and philanthropists, he is, on his controversial side, something like the 1850 English of Papal Aggression, or like Belfast Orangemen of to-day, or the stolid bourgeois Puritans of England and Scotland, who have not this American's pretense to be emancipated from prejudice, and who keep Irish Catholic boys out of universities with the same persistency that they are one with Americans in keeping Catholics out of Senates and Parliaments.

All one can say to those Irish-Americans who forget nothing and learn nothing about England is, just try the school laws of this land to which the Statue of Liberty guides you; just try them in the land of Cardinal Logue and Archbishop Walsh. Propose further that the government shall withdraw all grants from reformatories and

industrial schools in Ireland managed by religious men and women. Of course, to further assimilate ourselves to America, the nuns will have gone already from the "public schools." Then to liken Ireland to the other Republic that gave the Liberty Statue—"Oh, Liberty, what crimes have been done in thy name!"—the English Government will not see that the Catholic soldiers go in a body to the Catholic churches, but will rather forbid that any English soldiers shall appear in a body at Mass. French soldiers are not allowed thus to appear. And Republics surely talk much about liberty, and ought to know what it is.

Does the American Government distribute thousands of Catholic prayer books to its Catholic soldiers? Does the French? The English does.

The fact of it is, as was said by an honest fellow born in an "Irish" settlement on this side of the Atlantic, when his grandparents anyway were from the old country, in worse days—he said that "the people where I am would not believe these things"—would not believe in Lord Russell, a Catholic Chief Justice in England, nor in government schools suiting the priests in Ireland, nor in Catholic processions through English streets. No wonder. For not long since these last would have been stoned—their chief organizer says, by the way, that "it was the once persecuted Salvation Army that won the battle for our Catholic processions"—and in this century a Lord Chamberlain insulted a young Catholic lady of rank who appeared at court. And I have heard a poor old Irishwoman in America tell of how the mission fathers in her parish "at home," in County Armagh, were attacked in the church and had to escape from the town before their mission was ended, fifty odd years ago.

But how long are we going on believing that we are living two generations back? English or American Colonial soldiers certainly drove the Acadian French Catholics out of house and home—before that again. Hence even to-day France is Catholicism for their descendants. Simple folk often—they would scarce believe that England shelters exiled French monks; that in France a bishop was last year fined for going a few steps in his vestments from his palace to his church—that was an illegal procession—that their young seminarians have to serve in barracks. Would they believe it? Would the Newfoundland fishermen believe that the French Government has forbidden French sailors to take note of Good Friday? Those who know these things may not have the heart to tell their brethren. And one may well respect their sad reserve.

But when the French monk came to Canada to denounce England, that shelters him and his from his own intolerant France, the

French Canadian Archbishop promptly declared that the Frenchman's article was untrue and absurd and opposed to anything he would allow published with his episcopal sanction.

When we are considering England's relations to her colonies, when we are watching events in Ireland and abroad, we must stand in the world as it is to-day, and judge just judgment accordingly. Otherwise we shall see all amiss.

There is another great change that has come in England—the change in the Anglican religion—and that, too, has created new conditions, new affinities, new possibilities. This is still a change going on and a cause of great confusion. But it has revolutionized English art and architecture, has affected poetry and turned histories inside out, and has suggested, if unconsciously, a return to many good things in the ideal of Catholic society. Care for the poor, and solidarity in social work, and the use of natural means for keeping people, young and old, in a decency and in occupied leisure which will at least predispose towards things higher, and at the very least keep out of vice—all this good has been stirred up and helped in modern Protestantism by various religious movements, and among them by the one we speak of, which has also touched men and life by the side of that reverence to which Catholicism has never ceased to appeal.

Talking first of such work as that of the Y. M. C. A., a man who much dislikes its tone, yet allowed that in his wanderings as an engineer in large English towns he could see that the Y. M. C. A. rooms were usually the only refuges for young men without homes, after work hours were past, except the ever abounding gin palaces. In a large city nearer us there is a magnificent Y. M. C. A. building, near the Catholic Cathedral. The bishop, no doubt with wisdom, has warned young Catholics to withdraw from this very un-Catholic and often anti-Catholic roof, where they found reading rooms, baths, gymnasiums, free classes; which things—though that city is in large majority Catholic—they could not find any Catholic institution to give them. Now, do we not almost tempt God—if the words be not a violence here—when thus we neglect to give, what youth rightly or wrongly demands, places of recreation, and under the guidance of the clergy—indirectly so at least?

Are we not much too indifferent to these things towards bridging over the gap between the saloon as recreation and the Church as the working place of the soul? I mean, is a man who occupies himself with fairly serious books, who has the companions that libraries and reading rooms make known to him, or who has his bathing and his billiards, his boxing, fencing and cards among fairly decent friends, where drink and dirt, and brutishness and scoffing are hidden or for-

gotten; is such a man not more likely to love religion, the Catholic religion, appealing, as Cardinal Newman said, especially to the poetry in a man, or, rather, finding the poetry, the quieter and more tender virtues, just those which his religion loves to put before him, and in which she would have him dwell? Is such a man not better able to follow history, to understand the true relations of Church and State, to enter into the spirit of the liturgy, to form high ideals of conduct, leading to the ideal of the greatest, towards which all things may work together by our coöperation, Him indeed in whom we live and move and have our being? And can we not hope that such a one will in general help and not hinder the work of the Church and of its ministers, rather than the one who by ignorance, by idleness, by folly, if not by vice, lives during the week in a world so violently contrasted with the high and holy realm of Sunday that it is no marvel if he enters this last stripped of the needful wedding garment? There is *some* justification—is there not?—for what a charitable Protestant lady said, and not unkindly, to another Protestant, that while the Catholic young women had the religious life for those who were most full of care for their neighbor, yet those among them who would not think of being nuns were less given to good works, were more worldly and frivolous than many of their Protestant sisters of the world. And these last who are serious are too large a class to be compared with the Catholics who have religious vocations.

Readers of "The People of Our Parish" must have noticed how the Catholics of English-speaking America seem so greatly tormented with all difficulties arising out of social classes and surroundings. Certainly more Christianity of certain old world types would lessen worldly fuss and envy.

We speak hard words against French Catholics sometimes, because they seem to allow themselves to be tyrannized over and insulted; and no doubt Archbishop Ireland has numbers of the French clergy who value his advice to meet this wicked world in the gate. But, says the academician, Paul Bourget, *you* speak these words, you who have your reserved pews, up to which you rustle among the crowded poor, who are almost your footstool, you who have no American missionaries, while the French Catholics have two-thirds of our missionaries in the world, you who give so few sons and daughters to Our Lord's "perfect" state, whose congregations know —as compared with us in France—nothing of the Church's ceremonies, nothing of her music, of her holy seasons, of her offices, and who seem to have little opportunity given you of joining your voices in her worship of God. Yet all this—robbed from your fathers it may be—is all in her mind inspired of God; and if we have it not, we

are so far weaker Catholics, and should be learners, not carpers, not judges.

Praise to the French Catholics, said the English Benedictine, Father Burge, for that they have preserved the Church's music. Praise now to the Germans for their recent driving away of the silly or the theatrical music forbidden by God's voice in His service. But in America, if in these things we improve, yet it is not the English-speaking Catholics who improve most. However, I will say that the only time I heard "Yankee Doodle"—quick—in church was in a French Canadian church during the offertory.

We talk much of converts, but let us not scandalize them.

The other day an American Catholic paper had a word as to the model church choir of the world—in Glasgow—and why? Because the members of the choir, coming in, knelt down, the men on one side, the women on the other; nor did they talk all through the sermon; nor did they salute friends below in the aisle. And we think that a model. It shows to what we have sunk. And yet we hope to impress Protestants by the worship of God's Church, "performed" indeed—in a bad sense—in surroundings the opposite of those. Such a choir and ritual as is seen in the Paulists' church in New York, that is the common form to which Anglicans are now accustomed; as far as they can give true dignity to their remains of the Catholic offices, the which they eke out indeed with the words and forms of the Church thrown away by those beginners of sad Anglicanism of whose very High-churchism Heine said that it was "Catholicism without its poetry." But their choirs, habited in cassocks and cottas or surplices, form in their vestries and a (Catholic) collect is sung and responded to. They walk in procession through the church, the people standing; they kneel in their stalls, and the people and they pray, if they will, in silence. That is all good old Catholicism, is it not? Alas! as a convert organist said lately, when I think of all that beauty and orderliness, and "contrast it with the screaming and scrambling in the organ loft of this Catholic Cathedral." And he went on: "Whatever is Catholic seems to me to imply here everything that is horrible." He might have said for horrible "un-Catholic." For is not irreverence un-Catholic; and is it not a glory of the Church to speak of her art, her music, her use of God's natural gifts in her worship of Him? And is it "Catholic" now to have frivolous music, hideous painted windows, repulsive-faced statues and architecture in wretched contrast to that of some of the sects, to whom yet we appeal to come and admire the Beauty of Holiness?

This is taking things by the worst side; but it is a side. After fearful music we have heard the preacher speaking thereof as offering God our best—if only it had been anything like that—and in a

church little worthy (not of the congregation, as some now say, still less of Almighty God, as piety used to say) have we not heard that it reflects credit on everybody connected therewith?

It was a Protestant that wrote—about Catholic buildings—not of to-day:

> "They dreamt not of a perishable home
> Who thus could build. Be mine in hours of fear
> Or grovelling thought, to seek a refuge here;
> Or through the aisles of Westminster to roam,
> Where bubble bursts, or folly's dancing foam
> Melts, if it cross the threshold."

Trust in self, we all know, is a basis of morals. Yet Emerson's "Trust thyself; every heart vibrates to that iron string" is Emerson's, and may therefore naturally have an un-Christian undertone. In America we have surely needed individualism, and even perhaps self-complacency. But if there is any country in the world that can profit by "the great school of reverence," as the Protestant Guizot called the Catholic Church, surely it is this one. Were it not for the Catholic Church in America, where would modesty be seen raised to humility, or courtesy to reverence? We have a great inheritance. Do not let us cast it away when now even those without are envying us who have it. And yet the very trust in self, in the country and the present, must make us fear, even though there be cause for rejoicing. There is amongst some of us a strange and monstrously anti-Christian murmuring that what is American is right, or must surely be so; a tyranny it is, none the less dangerous because we call the despot the State or the Republic, and not the Emperor. Hobbes' crusher of real liberty, his lord over body soul, was the "Leviathan," with crozier as well with sword, which might be the sign of republic, of oligarchy or of King, if only the soul were not free under its sway. Christianity came to smite Cæsarism, to give the true freedom; not the freedom to think wrong or to do wrong, but to assert one's right to be at one with the absolute, with truth, with God. Christianity undermined the Empire; that saying has truth in it. St. Paul was loyal indeed to the State, but not in Cæsar's sense. The Catholics were most of them loyal under Queen Elizabeth, but not to the giving up of the Faith, what the State claimed. Does it not require all the wisdom of the Church, all the good sense of her rulers, all the tact they can put forth to guide us in this our atmosphere of subservience to what indeed even Emerson called "the inconceivable levity of local opinion?" Perhaps he would not be offended were we to apply his words to a whole country. And so *we*, at any rate, can apply them—we who are the heirs of the ages, the inheritors of the full truth, the citizens of the Church in the world, the children of a divided duty; which yet is indeed but one single duty, if in all things we take care lest we judge of the greater by the less.

Catholics first, Americans after; as in England one of the household of faith said, Catholics first, Englishmen after; which a Protestant ecclesiastic—the present Bishop of London—lately reversed the order for his religion and country. How absurd to do any such thing. As Bryce says in his *Holy Roman Empire,* Christianity from the first, and so in the ninth century, and so in the nineteenth, has rejected the notion of a national religion as an essential absurdity, and the negation of the supernatural. Bishop Creighton's words imply the non-existence of Christianity, would men observingly distil them out.

Our own eyes of the mind, may they not be favorably opened by public deeds here of late as well as elsewhere? Not in this world is our place of rest. Nor is a country a lawful idol to any patriot. That cosmopolitanism of the Church, Lecky says, what an advantage it gives her people in their education, her priests especially. But let us try to use our advantages better, and in those things that we now have ventured to consider. Let us remember that "the Saxons may live again to God," that if not in Ireland, yet in other English-speaking lands we Irish Catholics have our great and never sufficiently thought of responsibilities, with the possibly more wondrous future; that if France be lost to Christianity—of which there is little sign—Germany may be saved; that "our ancestors are our ancestors, and we are the people of to-day"—of every day, indeed, not bound into petty doubts and fears. What have we to do with misjudging any, with closing hearts of suspicion against any who are seeking the truth, or being led they know not how into that city where men still dwell with their imperfections, but yet at whose centre shines the fulness of that light which enlighteneth *every man* that cometh into this world?

W. F. P. Stockley.

Fredericton, N. B.

MICROBES AND MEDICINE.

IN our age of great scientific achievements it is an extremely curious chance that has turned up the very smallest of living things as the most interesting subject for human investigation. There is no scientific question that attracts more widespread attention at the beginning of the new century than the relations of microbes to disease. All of these microbes, little living things as they are, according to their derivation from the Greek μικρὸν βίον are far beyond the limits of vision of the unaided human eye. Some of them that are now being studied for the first time are even beyond the powers of our best microscopes. Yet the ways and works of these minute creatures are at the present moment a topic of the liveliest interest to more of the human race than any other set of beings in creation except man himself. This is surely a case of extremes meeting and finding their affinities in their very differences.

The history of the science of microbiology, as that of all the physical sciences, reads almost more like a romance than the presumedly prosy narrative of hard won scientific advance. The surprises as to the nature of the little beings who have proved to our broadening views to do much more for our weal than our woe are a perpetual reminder of the inexhaustible variety and teeming energy of the nature around us. Far beyond what preceding generations have considered the uttermost limits of celestial space new worlds and planetary systems, we might almost say universes, have been revealed to us by the improvement of the telescope and the patient study of astronomers. Points of light on the confines of space have proven to be suns around which doubtless revolve an attendant train of planets hidden as yet, but some time to be revealed. Just as far below the limits of ordinary human vision a new world has been laid bare by the microscope. The labors of the bacteriologist have taught us that law rules as inexorably in this universe of minutiæ as it does in the great astronomical world. The littlest of the little influence one another as inevitably as do the mighty masses out where abyss calls to abyss. And everywhere there are the unmistakable signs of order that requires intelligence for its evolution and maintenance.

Microbiology has helped biology in its study of the relations of living beings of all orders. The wide application of the principles that rule the living functions of the smallest beings give an added interest to their study far beyond the practical importance of their

casual activity in human disease. At the present moment, then, there is an intense scientific as well as popular interest in microbes and their ways.

ORIGINS IN MICROBIOLOGY.

Almost as far back as the memory of man goes there existed at least a vague idea that contagious disease was due to minute living beings. A contagium vivum was assumed by all the old laws with regard to sanitation. It was understood that where dirt was allowed to accumulate and contaminated water to stagnate, there matter dangerous to health took on a new virulence. That this was due to vital reproduction and multiplication was at least implicitly understood. Every now and then down the centuries such an idea was explicitly expressed by some more thoughtful seeker into the causes of things. Some of the old pagan philosophers in the days when philosophy was proud to be thought *scientia causarum rerum* were sufficiently interested in physical truth to suspect at least that the cause of disease might prove to be living germs. Some of them hint at the existence of living beings so small that they could not be seen by the human eye. These expressions of opinion were apparently shrewd guesses at truth, anchors cast to windward in the shift-current of human knowledge, in the vague hope that they might find some rock of fundamental fact to cling to rather than serious scientific opinions.

It was well understood very soon after the physical sciences began to develop in modern times that the minute size of the living causes of disease kept them out of human vision, and as the microscope was undreamt of it was, of course, thought that they would never be a subject for exact human knowledge.

The first man to see microbes seems to have been the Jesuit Father Athanasius Kircher, the founder of the Kircher Museum, in Rome. Notwithstanding the most varied interests in history, the classics and archæology, Father Kircher found some time to devote to the physical sciences. In 1671 he reported the finding of "minute living worms" in putrid milk, cheese, vinegar, etc. He did not follow up his researches in this matter because minute investigation of any serious nature was practically impossible. The secret of the compound microscope was as yet undiscovered.

Lœwenhoek, in 1675, was the first to use a combination of lenses that gave sufficient magnification to enable him to see what we would now call bacteria. He called them animalculæ, that is, little animals, principally because of their spontaneous motility. He has left sketches of what he saw that enable us to recognize his animalculæ as what we now call spirilla—spiral bacteria. After a time

Lœwenhoek suffered from scruples as to the religious tendencies of his work. As these little living things had never been seen by human eyes before, he argued that it was the evident intention of the Creator to keep them concealed from men. To him it seemed flying in the face of Providence to continue his investigations, and so the initial steps in microbiology were left for another century.

Some very acute forecasts as to the nature of the living contagion that caused infectious disease were hazarded from time to time by thinkers whose ideas were far ahead of their times. Robert Boyle, the father of chemistry, for instance, dared to formulate a prophecy that is very striking because of its literal fulfilment centuries afterwards. "He that thoroughly understands the nature of ferments and fermentations," said Boyle, "shall probably be much better able than he that ignores them to give a fair account of divers phenomena of certain diseases (as well fevers as others) which will perhaps be never properly understood without an insight into the doctrine of fermentations." It was the study of fermentations about the middle of the present century that led to the development of the parasitic theory of disease. It was the great discoverer in the realm of ferments, Pasteur, himself another chemist like Boyle, who was to do the ground-breaking work in medical bacteriology and furnish a sure basis of fact for the science of the etiology of disease, the department of medicine which up to that time had always been most nebulous and unsatisfactory.

THE FIRST DISEASE GERM.

The preliminary discovery in medical microbiology was made, however, before Pasteur entered the field. In 1850 Drs. Rayer and Davaine, as the result of an investigation of the nature of splenic fever, announced that: "In the blood of animals stricken with the disease little thread-like bodies about twice the length of a red blood corpuscle are to be seen. These little bodies exhibit no spontaneous motion." This is the first accurate and assured observation of what we now know as bacteria.

Rayer and Davaine attached very little importance to their observation, and it attracted practically no attention from the scientific world at the time. Splenic fever, thanks to a great extent to the discovery of its microbic cause, has ceased to be the scourge it was at the time Rayer and Davaine were so acutely studying it. About the middle of this century flocks were frequently decimated by it. It raged in all the European countries with great virulence. In Russia, known as the Siberian plague, it often caused fearful destruction among the cattle of the steppes. In Egypt something of the

estimation in which it was held can be gathered from the fact that it was connected by tradition with one of the ten plagues of Moses. In France there were years between 1840 and 1850 when splenic fever caused losses of from fifteen to twenty millions of francs ($3,000,000 to $4,000,000). In 1852 a special commission appointed for the purpose showed that the disease existed not only among horned cattle, but that certain fatal affections in other domestic animals which had been masquerading under other names were really special types of splenic fever. Sheep, for instance, and horses were promptly infected by injections of material from cows suffering from splenic fever. The disease ran a slightly different course to that in the cow, but it was quite as surely fatal. The disease occasionally attacks man himself. It is not unknown in this country even at the present time. It occurs especially among those who have to handle the hides and hair of animals that have died from the disease. The name by which it is familiarly known (wool sorter's disease) is due to this fact. It is also called malignant pustule because the primary symptom of the affection is a pustule that develops at the point where the inoculation of the virus took place. This pustule is usually very red and angry looking, and these characters have suggested the name by which it is commonly known—anthrax, *i. e.*, a glowing coal. The anthrax bacillus produces very virulent poisons during its growth in the tissues. These are absorbed into the system and cause high fever, prostration and finally exhaustion and death.

Despite the importance of the disease no further advance was made in the knowledge of its cause for over twelve years. During the last five of these years Pasteur described the various ferments and showed that fermentation instead of being a series of chemical reactions was a complex but easily intelligible biological process. In 1863 Davaine realized the importance his chance observation made in 1850 might have in explaining the cause of anthrax. Pasteur demonstrated that butyric fermentation, that is, the putrefactive process that gives to certain organic fatty products the odor and taste of rancid butter, was due to a micro-organism that possessed the characteristics of vibrios or bacteria. This recalled to Davaine the thread-like bodies that he had seen in the blood of sheep suffering from anthrax twelve years before. If filiform bodies could produce in a liquid the series of changes we know as fermentation, why might not analogous micro-organisms produce such changes in the blood of an animal as would lead to the systemic symptoms of anthrax?

He procured some blood from an animal suffering from splenic fever and inoculated it into healthy animals. They always suc-

cumbed to the disease. The blood of the dead animals always contained the filaments he had described years before; that of the animals experimented upon never showed them before the inoculation was made. For some time after the injection of material from infected animals no filaments could be seen in the blood of the animal experimented on, and so long as they did not make their appearance the blood of this animal remained uninfectious when inoculated into other animals. Apparently the cause of the disease was these little filaments. For years a heated discussion was carried on over the question whether these filaments were a result of degenerative changes in the blood of diseased animals or a true casual factor in the disease. After the anthrax bacteria could be obtained in pure cultures on artificial media and after many generations of this kind of growth would still produce the disease all objections fell to the ground.

While anthrax is not important or widespread, two very significant advances in our knowledge of disease and its spread have come from the study of the anthrax bacillus. Mammals whose blood is about the same temperature as that of man take the disease very readily. The meat eating mammals, especially those whose temperatures are higher than that of man, do not readily take the disease. Birds whose temperature is very much higher than man's (about 6 to 8 degrees) and reptiles whose temperature is much lower are very refractory to the disease. If live fowls be cooled in a refrigerator until their blood comes down to about human temperature they become susceptible to anthrax and perish if inoculated with anthrax bacilli. On the other hand, cold-blooded animals like snakes become susceptible to the disease if they are kept for a time in a chamber warm enough to bring the temperature of their bodies up to man's.

It is evident, then, that susceptibility to anthrax is not a matter of animal peculiarity, but rather of bacterial virulence. Anthrax bacilli grow with fully developed powers only at a very limited range of temperature between about 96 and 100 degrees F. Above and below this temperature they do not acquire their full disease producing properties. This question of susceptibility is most interesting and important. Anthrax furnished the first definite information on the subject and gave the first hint as to the reason for the localization of such diseases as malaria and yellow fever.

The study of anthrax led to one other important discovery. The disease was found to develop every year in certain pastures. For a time it proved a very difficult matter to explain this peculiarity of the disease. It seemed to come to a complete stop for the time in a certain flock, and then seemed to originate *de novo*. These observa-

tions apparently contradicted the theory that disease was always a continuation of a preceding infection and never a new entity. Microscopic study showed that under conditions adverse to its continued growth certain appearances became noticeable in the bodies of the bacilli. Some portions of the little organisms took stains quite differently to other parts and refracted light quite differently. It was found that microbes in which these differentiated portions occurred were much harder to destroy than others. Besides it was found that they resisted drying for long periods. They did not continue their multiplication, but seemed to be in a resting stage. It was as if, like the larger annual plants, at the approach of unfavorable weather they had cast their seeds and trusted to them to continue the species. The little rounded bodies that could be seen in the bacilli then received the name of spores (*i. e.*, seeds), and it was set down as established that all microbes that produced spores were resistent to bactericidal methods. This discovery accounted for the preservation of many forms of bacteria in the intervals between epidemics of the diseases which they occasion.

A further interesting discovery came when it was found that if animals susceptible to anthrax were set to graze in a meadow beneath which the carcasses of animals dead from anthrax had been buried they were liable to contract the disease. Pasteur showed that if the graves of sheep dead from anthrax were surrounded by a fence and but a portion of the flock allowed to graze above the dead animals only these sheep contracted anthrax. Those grazing in the same meadow, but kept at some distance from the anthrax dead bodies did not contract the disease. Pasteur then showed that the earthworms in the earth above the infected bodies contained the germs of anthrax and that they often carried them from considerable distances beneath the surface of the soil. It has since been shown that anthrax bacilli in the spore stage may occur in the earthworms above the bodies of animals that have died from anthrax for many months and even several years after the burial of the bodies. This was the first great advance in our modern knowledge of the distribution of disease. Contagious diseases we know now are practically always carried by living agents. The elements wind and water, formerly thought so instrumental in the spread of disease, very seldom convey contagion, wind practically never.

THE MOST IMPORTANT BACILLUS.

For the human race undoubtedly the most important bacillus is that which causes tuberculosis. About one in eight of those that die are carried off by the growth of this little plant in their tissues.

Many of them are in the prime of life. Not a few of them were but a year or two before in blooming health. All of them have had high hopes dashed to the ground because at a given moment they became the chosen habitat of a little specimen of the plant family which asserts and maintains its rights to live and increase and multiply despite the havoc it makes with the well laid plans of mice and men.

It had been suspected by certain medical men for some years before Koch's discovery of the tubercle bacillus that tuberculosis in its manifold forms might be due to a specific germ or microbe. It had even been hinted by some that tuberculosis might be contagious. How rare such ideas were in the great body of the medical profession can be best understood from the almost universal protest that greeted Koch's announcement in 1882 that he had isolated the bacillus which causes tuberculous processes. The older and more experienced as a rule the practitioner, the more profound was his incredulity as to the value of the trumpeted discovery.

Needless to say, Koch's investigations have been substantiated by almost innumerable observers during these last eighteen years. Medical writers recall now that over 100 years ago the impression gained currency in Naples, where tuberculosis was raging with special fury, that the disease was contagious. It was even suggested at that time that the contagium was of such a character that it could be contracted from living in houses in which tuberculous, especially pulmonary consumptive, patients had lived—that it might, in a word, cling to the walls of living rooms or exist in corridors. This theory obtained such a hold on the Neapolitans that certain supposedly infected houses in which many patients had died from tuberculosis were burned. This was followed by an amelioration in the city's health, but whether this improvement was due to the better sanitary conditions after the fire or to the actual burning of so much contagious material, who could say?

The medical profession as a body clung to the idea of heredity as the great cause of consumption. When successive members of families constantly fell victims to it, father and son, mother and daughter, brothers and sisters, what else could be thought? Yet the seemingly necessary inference, as many another apparently of as absolute a character, proved utterly groundless. Members of the same family died not because of a common heredity, but because of contact with one another (for contact and contagion are from a common root), and because they lived in a tainted atmosphere.

Koch showed that there existed in the sputum of consumptives a little rod shaped microbe which when inoculated into susceptible animals produces lesions exactly like those that occur in human

beings suffering from tuberculosis. This discovery made the German bacteriologist famous; first, because of the important nature of the information it conveyed on a subject so vital to the human race, and second, because of the difficulties that had to be overcome in making the discovery. The tubercle bacillus grows very well in human beings and in most animals, but it was no easy matter to entice it into growing on a non-living medium. The little plant has what may be called social instincts. It is essentially parasitic in nature—that is, it prefers, according to the etymology of παρασίτος, to take its food along with some other living being or at least at the expense of the other being. It proved no easy task to find some food material that would tempt the tubercle bacillus to lower its dignity of parasite to man and the higher animals and become merely a saprophyte, that is, a plant that draws its nourishment from decaying material. Koch after a long series of experiments found that the cultivated taste of the bacillus could be satisfied with blood serum. It would grow on this medium, however, only when it was kept for weeks continuously at the temperature of the human body. If the temperature was allowed to drop below this then the bacilli failed to grow. If by accident the temperature went much above body temperature then failure was also inevitable. The main adjuvant to Koch's success was a rather unsightly looking oven-like apparatus arranged to be heated directly by a coal fire and kept at animal heat by complicated checks and counter checks and the care of the master and his assistants. This oven was very different from the perfect brood ovens we now have, in which by means of gas heat and a self-regulating gauge the temperature can be kept absolutely at blood heat without a moment's thought or care for months. The original old oven, however, in which Koch was first successful in obtaining growths of the tubercle bacillus is one of the curiosities of the Government Sanitary Museum in Berlin. Far more than the original steam engine it represents a great step in advance for the human race. It will be to future generations the symbol of a movement that has done more for man's happiness than any other in the history of the race.

Since Koch's time we have learned that tuberculosis is contagious, though not virulently so. Something more than one-seventh of the human race constantly suffer from the disease, yet the rest remain free. Most people are thoroughly resistant to invasion. The Germans have a saying that we are all really a little tuberculous, but this must be taken in a certain limited sense. In about 75 per cent. of all bodies that come to the autopsy table for causes other than tuberculosis, some tuberculous nodules are nevertheless found in the tissues. Loomis showed that the bronchial glands of many bodies

presenting perfectly healthy lungs contained living and virulent tubercle bacilli. For successful invasion of an organism by the tubercle bacillus something else is necessary besides its mere presence in the tissues. Only in patients who are predisposed to the disease will the tubercle bacillus grow and flourish. When we come to discuss the bacillus of diphtheria we shall find that individual predisposition is important for the development of diphtheria also. Virulent diphtheria bacilli may live in a healthy throat without producing diphtheria. This old idea of a predisposition to disease being a necessary element in the causation of disease is becoming more and more prominent the more we learn of microbes. Long ago its value as a factor in disease was recognized, but the reason was not known. The reason of it is coming out now from a source that promised originally to make predisposition to disease a myth.

In what the predisposition to tuberculosis consists we do not know. We know that it runs in certain families. We know also that it may develop in almost any one, however resistant to disease invasion ordinarily, who permits himself to run down in health, and especially in weight. The life insurance companies who have examined into this matter very carefully, because it is their business, prefer to take a risk on the life of an individual who has a tuberculous history on both sides of the family, but is himself in good health and of normal weight than to insure the life of a person without tuberculous heredity, but who is much under the average weight he should have for his stature. One feature of the predisposition to tuberculosis can be realized by the case of those who suffer from diabetes. These people have a superabundance of sugar in their blood and are very liable to be attacked by tuberculosis. Diabetic patients are now carefully segregated from those suffering from tuberculosis in our hospitals. Curiously enough, tubercle bacilli outside the human body grow better on blood serum to which a little sugar has been added. On the other hand, it has been noted that diabetic patients seldom suffer from ordinary pneumonia, and bacteriologists point out that the addition of sugar to a culture medium always makes it an unfavorable soil for the growth of the pneumococcus, the microbe to which pneumonia is due.

This points to the fact that changes in the blood may make very serious differences in susceptibility to all disease, and especially to tuberculosis. Not long ago the tubercle bacillus was analyzed and was found to be composed more than one-half of fatty material. Naturally a single bacillus was not employed in the analysis, but many of them grown together and the mass submitted to chemical assay. For its luxuriant growth, then, it has been argued that the tubercle bacillus requires the presence of free fatty material. This

is supplied to it in the ordinary culture media by the glycerine, which is added to all media intended for the cultivation of the tubercle bacilli because it stimulates their growth. It is at times especially, when individuals are losing weight, when the system is taking up the fat formerly deposited in the tissues and using it for the ordinary processes of life, that free fat is abundant in the circulation in the form most suitable for use by the tubercle bacillus. It is at these times that tuberculosis is always contracted.

SOME BACILLI RELATIVES.

About twenty-five years a disease well known in cattle under the name of "big jaw," because of the enlargement of the soft and bony tissues of the jaws which it occasioned, was found to be due to the presence of a form of bacterium hitherto undescribed. This microbe grew branchingly and its filaments proceeded more or less regularly from a common centre. This radiate structure suggested the name actinomyces, or ray fungus, from the Greek ακτίνος, ray, and μύκος, fungus. Ordinary bacteria are known scientifically as schizomycetes, *i. e.*, fission fungi (from σχίζειν, to divide), because they multiply by dividing into two, and these two continue the division and propagation is carried on. Actinomycosis took on a new interest in 1885, when it was found to affect man as well as the animals. Its lesions had often been noted in human beings, but owing to a certain similarity between them and the lesions caused by tuberculosis their true significance had been missed. In man the main focus of the disease is often in the lungs. In these organs the similarity of actinomycosis to tubercular consumption may be very striking. Infection may take place into a carious tooth, with spread of the process to the jaw as in animals. The ray fungus which causes the disease seems to find a favorite dwelling place on grains and grasses. Portions of grain, seeds or spicules of their stems are often found at the original site of invasion of the disease. In countries where actinomycosis exists the inhabitants are warned against the habit so common among country people of drawing straws or the stems of grasses through the teeth. The disease is rare and would not deserve a mention in a review of human bacteriology but for certain recent discoveries.

The radiate form which the actinomyces assumes in growing was thought for many years to be peculiar to itself alone. In examining sections of tissue that had been obtained from a leper, however, it was found that the leprosy bacillus which had been discovered by Hansen in Norway and described as a simple rod-shaped microbe of about the size and form of the tubercle bacillus some-

times grew also in radiate fashion. Further investigation only confirmed this observation, and showed that wherever the leprous process was especially acute and the tissues in which the bacillus grew were succulent, supplying abundant nutritive material, the bacillus of leprosy grew very similarly to the ray fungus. Then careful observation of the bacillus tuberculosis showed that this microbe often grew in branching forms instead of as a simple rod or bacillus. Babes showed that when injected into the meninges of small animals the tubercle bacillus often grew in a radiate form. Other investigators have confirmed these observations, and now it is generally conceded that the tubercle bacillus bears some very close relationship to the bacillus of leprosy and the ray fungus which causes "big jaw" or "lumpy jaw" in animals.

It is a curious fact that these diseases had been grouped together by pathologists long before the relationship between their microbic causes was even suspected. All of them produce changes in the tissues that are, when examined under the microscope, found to be very similar. The inflammatory reaction which infection with any of these diseases occasions causes the appearance at the site of inoculation of three forms of cells—round cells, epithelioid cells and giant cells. This characteristic succession of cellular appearances does not occur with other infections. The diseases are simliar also in other respects. All of them are contagious, yet not intensely invasive. Tuberculosis is not contracted by a single chance contact with some sufferer from consumption, but by intimate intercourse for months or at least weeks with individuals suffering from tuberculosis.

Tubercle bacilli occur in many places and are breathed in without producing consumption. They have even been found in the mouth of perfectly healthy individuals. Leprosy, though its traditional reputation with the public would seem to class it as one of the most contagious of diseases, is in reality but very slightly contagious. There is not a case on record in medical literature of leprosy having been contracted by contact with lepers except where intimate association with the sufferers had been the rule of life for at least ten years. There are cases where leprosy was acquired apart from any hereditary taint, though at Constantinople a school of clinicians exists experienced in the treatment of lepers, who insist even now that heredity is the prime factor in the causation of the disease. Finally, actinomycosis, the other disease whose specific microbe resembles the germs of tuberculosis and leprosy, is only very slightly contagious. It is hard to produce the disease by direct inoculation. Only when the actinomyces or ray fungus is retained for long periods in contact with the tissues, as when a seed of infected grain

finds its way into a carious tooth or when an infected piece of grass or grain is carried by aspiration into the lungs, does the disease develop.

The question that occupies many minds in bacteriology at the present moment is: Are these germs of disease essentially distinct one from the other, or are they accidental modifications from some common stock? If the latter supposition is true, is it possible that by reversion one should reassume the disease-producing qualities of the other? As it is, while these little plants present certain striking similarities of form and of disease-producing power, they are no more nearly related to one another than are the apple and the pear or the lemon and the orange. We never hope to gather lemons from orange trees, and there is no more probability of finding that a lepra bacillus has given or will give birth to a tubercle bacillus.

MICROBIC TYPES IN ANIMALS.

Affections resembling very much in their course and symptoms the various tubercular affections in man have been noted in a number of mammals and in birds. There is a widespread belief that wild animals are comparatively free from disease. Their lives are known to end as tragedies, in the words of a recent sympathetic biographer, but it is not considered that they are liable to wasting disease. As a matter of fact, animals even in their wild state suffer from a number of diseases. Many of them fall victims to tuberculosis. Even the lions found dead along the edge of the great desert of Sahara, the perfectly dry air of which might be expected to prove a safeguard for them, present in many cases evidence of tubercular lesions. Most animals that die in captivity perish from tuberculosis. This is especially true for monkeys, for all animals from the tropics kept in our climate—though the polar bear is also a frequent victim—and for birds. The question of the identity of these diseases with human tuberculosis is important because of the opportunities for infection provided by intercourse with these animals and by the fact that their flesh is used as food. In cattle, for instance, the usual form of tuberculosis, "pearly disease," does not resemble the human form of tuberculosis, but other symptoms of the disease bear marked analogies to those observed in human beings. The bacilli of bovine tuberculosis are not so virulent for certain susceptible small animals as is the bacillus of human tuberculosis. On the other hand, the bacilli obtained from human sputum usually fail to produce true tuberculosis when inoculated into cattle. An inflammatory reaction is produced around the point of inoculation, but the disease does not spread.

Tuberculosis in birds seems to bear a very close resemblance to the form of the disease that occurs in mammals. That it is quite different, however, is proved by the fact that the bacilli found in tubercular lesions in birds are quite innocuous for mammals, while those obtained from mammals are equally harmless for birds. The temperature of birds is some five or six degrees higher than that of mammals, and this is known to protect birds from certain diseases caused by microbes whose favorite temperature is that of the human body. We have already mentioned how chickens fail to take anthrax so long as their temperature remains normal, but acquire the disease if exposed to it after their temperature has been artificially lowered by cold. The tubercle bacilli become modified by living at the unusual temperature, and so lose their virulence for animals of slightly colder blood.

For many years conservative bacteriologists insisted that the bacilli of avian tuberculosis were essentially distinct from those which caused tuberculosis in human beings and other mammals. It is only within this last year that the identity of these two forms of bacilli has been demonstrated. The method by which it was done was very ingenious. Cultures of tubercle bacilli from human sputum were enclosed in little sacs made of collodion. These sacs allow fluids to penetrate to their interior, and so permit the constant regeneration of the nutrient material on which the bacilli grow. They also allow the bacterial products to escape, for after awhile bacteria would become choked in growth by the presence of their own excrementitious materials. The collodion envelope, however, does not permit the egress of the bacteria nor the ingress of certain wandering cells in the animal body, the white blood cells, which would englobe, *i. e.*, swallow and digest the bacteria. When these little collodion sacs are placed in the peritoneal cavities of fowls, the microbes contained in them continue to increase and multiply for a long time. At the end of several months the bacilli of human tuberculosis begin to take on resemblances to the bacilli of fowl tuberculosis. According to Nocard, who is working in the veterinary department of the Pasteur institute just outside of Paris, at the end of nine months the human tubercle bacilli became transformed completely into the avian variety, which has been heretofore considered absolutely distinct. Human tubercle bacilli cultivated this way will produce the characteristic lesions of avian tuberculosis in birds. How rapidly such transformations of one bacillary variety into another may be effected under favorable circumstances is not yet known. The fact of the essential identity of these bacillary forms indicates the dangers there may be in animal contact.

THE BEST KNOWN BACILLUS.

The bacillus about which we know most for all medical purposes is the one which causes diphtheria. This disease has been generally recognized as distinct from other throat affections only for about eighty years. Bretonneau described the clinical course of diphtheria very accurately about 1821, and to him we owe the name diphtheria—from the Greek διφθερα, a membrane, because of the membrane that forms over the mucous surface of the throat in patients attacked. Some Spanish physicians seem to have recognized the distinct character of the disease about the beginning of the century, but their work received so little notoriety that it is only of late years that the rest of the medical world has known of their prior successful investigations. Diphtheria as a disease, however, can be traced back for thousands of years. Aretæus' description of certain throat affections leaves little room for doubt that he had seen typical cases of diphtheria. What Galen calls the chironian ulcer was a throat affection with a pseudomembrane on the mucous surface, sometimes of the pharynx—that is, the tonsils and upper throat, and sometimes on the larynx. There are even historical traditions of the existence of the disease much farther back than this. The Greeks believed it had come to them from Egypt.

In modern times it is easy to find traces of the disease in recent centuries. During the year 1557 there seems to have been a very generalized epidemic of diphtheria thoughout Europe. Many deaths occurred in Germany, France, Northern Italy, Holland and Spain. A little more than a century later there is more than a suspicion of the occurrence of the disease in America. Samuel Danforth, a Pilgrim descendant, lost four of his eleven children—(Pilgrim descendants' families were larger in those days than at present)—in the course of two weeks from a throat affection described as a "malady of the bladders of the windpipe." The term bladder can scarcely mean anything else than the pseudomembrane portions of which had been coughed up during the course of the disease. About twenty years ago Klebs found a special form of bacillus in the throat of patients suffering from diphtheria. Shortly after Lœffler showed that his bacillus very probably stood in a causal relation to the disease. Since then we have learned much about the so-called Klebs-Lœffler bacillus, but instead of solving all the obscure problems connected with the microbe, difficulties have multiplied at each new discovery in the microbiology of the bacillus.

For instance, we know now that the diphtheria bacillus may assume very different forms, according to the culture medium on which it is grown. Usually it has the appearance of a rather plump

red, which takes staining material irregularly and so gives the impression of containing granules in its substance. But the bacillus may assume very different forms to this. It may have a bulbous enlargement at one end and so present the so-called club-shape. It may have bulbs at both ends—the dumb-bell form. Slender types of the bacilli may occur especially in the membranes from diphtheritic throats, and these are prone to be curved. Even branching forms of the bacilli have been noted.

The questions very naturally arise are all these forms equally virulent? are they all derived from an essentially identical family? It would seem that these questions must be answered in the affirmative. We know of the existence of a group of bacilli resembling the diphtheria bacilli in all ordinary particulars except that they do not produce diphtheritic symptoms in animals. Whether this pseudo-diphtheria bacillus is, as some authorities think, only a degenerate form of the true diphtheria bacillus, which has for the moment lost its virulence, remains to be determined by future investigation. The picture presented by a bacillus under the microscope cannot be a criterion of its nature. Many bacilli resemble each other very much. They are plants, and if it is remembered how difficult it would be to distinguish many plants from each other if we had only a distant view of them, it will not be hard to realize that mere external form is not and cannot be used as a final standard for differentiating bacteria. The virulence of bacilli—that is, their power to produce a certain disease—has been considered an ultimate criterion, but even this is not absolute. Disease depends on susceptibility as well as infection—that is, it is not enough merely to have the germ of a disease present to produce that disease; the animal experimented with must be liable to the disease and must at the moment be in a state which it is not specially resistive to the invasion of the specific microbe.

A number of observers have shown that the true diphtheria bacillus virulent for animals may occur in the throats of perfectly healthy individuals. It may also occur in affections of the throat that bear no resemblance to diphtheria. It is even claimed that it is because of its liability to be carried around thus by people who are either, to all appearances, perfectly well or who seem to be suffering only from mild throat trouble that the diphtheria bacillus continues to be distributed widely and to cause frequent outbreaks of the disease where no diphtheria existed before. A form of bacillus very like that described by Lœffler occurs almost constantly on the conjunctiva or mucous membrane of the eyes of normal individuals. When diphtheria does attack the eyes, as happens sometimes in nurses and doctors, because material from a diphtheritic throat is

coughed into them, the affection is always very severe. Is it possible, then, that one of the diphtheria bacillus family has a habitat on the conjunctiva, just as the pneumococcus, the cause of pneumonia, is constantly present in the mouth, yet without producing symptoms?

Why speak of the diphtheria bacillus, then, as the best known bacillus? Because the tracing of its microbiology has helped to throw light on many of the important questions that concern susceptibility and immunity to disease. The study of this bacillus has especially brought out the fact that was being lost sight of in the enthusiastic search for specific germs for every contagious disease that the absence of individual resistance to disease constitutes at least as important an element in the causation of disease as does the virulence of the bacilli. Besides, it is practically for diphtheria bacilli alone that certain other important questions as to the nature of bacilli and their products have been answered. The toxine, that is the poison produced by the bacillus, the absorption of which causes the fever and prostration incident to diphtheria, has been carefully studied. Its surprising power for evil even in extremely minute quantities has been demonstrated. In this respect any of the ordinary poisons we know, strychnine or atropine, or even aconitine, do not compare with it. The amount of pure diphtheria toxine that will produce serious symptoms in an animal is almost inappreciably small, probably less than one billionth of the body weight.

More than this, however, bacteriologists have learned something of nature's method in neutralizing this very virulent poison in the human system and have succeeded in finding a means to help her in the process of neutralization. When diphtheria patients recover there is manufactured in their systems a substance which combines with the toxine of diphtheria and renders it harmless. This substance is called an antitoxine. It was found that when animals were inoculated with very small quantities of diphtheria bacilli they readily recovered from the symptoms produced. If inoculated again with the same amount they recovered even more readily. Something evidently had been left in the system which helped them to overcome the virulence of the diphtheria bacilli. If now they were inoculated with larger and larger doses they finally reached a condition in which they were able to withstand many times what would have been a fatal dose of diphtheria bacilli before the series of inoculations was begun. It was found further that if some of the blood of animals whose ability to resist diphtheria bacilli had been thus deliberately developed was injected into other animals at the time when these animals received inoculations of diphtheria bacili,

they suffered less from the effects of the inoculation and recovered sooner. This is the principle on which diphtheria antitoxine is manufactured.

In practice a large animal such as the horse, who is at once naturally very resistent to diphtheria and is able to furnish large quantities of blood serum, is taken. The animal is inoculated with diphtheria bacilli and after the fever and prostration which ensue have subsided another inoculation, and after a similar interval another is given. Each time the strength of the inoculation is increased. In this way the antitoxic value of the animal's blood serum becomes very great. When one-tenth of a cubic centimetre of horse serum is able to protect an average sized guinea pig against ten times the ordinary fatal dose of diphtheria bacilli the serum is said to be normally antitoxic. One cubic centimetre of such a serum is designated as one antitoxic unit. The serum can be made much more strongly antitoxic than this, so that one cubic centimetre may represent hundreds of antitoxic units. It is considered an advantage to have the antitoxine value of the serum very high, for then it is not necessary to inject a large quantity of the foreign serum into diphtheria patients to secure the desired results. For ordinary cases of diphtheria from 1,000 to 3,000 antitoxic units are employed, according to the virulence of the affection. Whenever the disease extends into the nose the larger doses are given, because in the succulent tissues of the nose the bacilli grow rapidly, and besides absorption goes on more readily from here than from other parts of the upper respiratory tract. Whenever the larynx is affected, that is whenever the mucous membrane covering the vocal chords is invaded by the disease, larger doses, even to 5,000 or 6,000 antitoxic units ,are given. The formation of the false membrane that is characteristic of diphtheria in this region soon closes up the chink of the glottis, the narrow opening between the vocal chords for breathing purposes, and the little patient is liable to asphyxia for want of air.

Many complaints have been made of the harmfulness of antitoxine. There is not a single case on record where it ever caused death. Children sometimes die suddenly. If the sudden death occurs shortly after an injection of antitoxine straightway the death is attributed to this. All the reported deaths have been due to other causes. Antitoxine does not affect the kidneys. On the contrary, the renal affection which so often occurs with diphtheria subsides after the administration of antitoxine is begun. How little danger there is in the remedy may be seen from the fact that while 5,000 units is usually the largest dose given, in very severe cases, recently from 60,000 to 80,000 antitoxic units have been given in three days,

with reported good results. Certain inconveniences have been noted as occurring after the administration of the remedy. Skin eruptions resembling hives have been reported, occasionally joint swellings occur. These conditions are never serious, however, and the symptoms disappear after a very short time.

The successful introduction of antitoxine represents the first great triumph in the field of bacteriological therapeutics. The death rate from diphtheria has been lessened to a wonderful degree. Statistics from all over the world seem to show that while the death rate from diphtheria in various epidemics before the introduction of antitoxine was about 30 per cent., the death rate now is under 12 per cent. The impressions of medical men who treated many cases of diphtheria before and after antitoxine days show that the confidence in the new remedy is not merely a result of the conviction forced upon them by statistics of cases, but is due to their own personal experience, showing them that the course of diphtheria under antitoxine is quite different to what it was under other modes of treatment. The expression of the superior of a large orphan asylum in one of our principal cities is very striking in this regard. "Before antitoxine came," she said, "when an epidemic of diphtheria occurred we knew that it would spread widely and that more than one-half those attacked would die. Now we know that the spread of the disease will be limited and only a small percentage of the cases prove fatal."

THE SMALLEST MICROBE.

About three years ago Professor Lœffler, one of the original discoverers of the diphtheria bacillus, described some of the negative characters of the smallest microbe so far investigated. He was studying foot and mouth disease, an affection prevalent among animals in certain countries, and which may exceptionally attack man. It was found that a very small portion of the diseased tissue of an infected animal sufficed to produce the disease when inoculated into another animal. The most careful search, however, failed to reveal any traces of microbes in the tissues or in the secretions from the lesions. When inoculations were made from the infected tissues in bouillon, a favorite culture medium on which many kinds of bacteria grow luxuriantly, no change took place in the appearance of the bouillon. Usually the meat solution employed in such observations grows turbid after inoculation and a flocculent scum forms over it as a result of the growth of the microbes. Despite the fact that the bouillon remained to all appearances unchanged, it was found to have acquired the property of conveying foot and mouth disease to animals into which it was injected. This virulence remained inherent in the liquid even after filtration through a Pasteur filter.

As the unglazed porcelain of this form of filter never fails to detain all ordinary bacteria, this latest microbe must be much smaller than any micro-organism hitherto studied.

The most painstaking scrutiny in the examination of the bouillon cultures of the microbe under the highest powers of the microscope fails to reveal the presence of anything having the appearance of a bacterium. That some microbe is present is evident from the fact that the bouillon after inoculation becomes progressively more virulent in its effects. If injected before inoculation with material from lesions of foot and mouth disease it fails to produce any effect; if injected shortly after the introduction of the infectious material it is but slightly if at all virulent. After some days, however, it has all the virulence of material taken directly from an animal suffering with the disease.

Humboldt in his demonstration of the theory of the microscope showed that the minimum visible would be of the diameter 1-125,000 of an inch. When objects are smaller than this in size diffraction takes place around their edges and the shattering of the waves of light precludes vision. The ideal microscope has not been made as yet, so that the limit of microscopic vision has not reached the theoretic minimum visible. The ordinary small microbe, such as the staphylococcus, measures from 1-30,000 of an inch to 1-20,000 of an inch in diameter. This new germ is probably not more than 1-100,000 of an inch in any dimension. The vista of possibilities for life in infinitesimally minute particles opened up by this discovery seems almost endless. If portions of matter so small as to be beyond the range of our microscopes cannot only support independent life, but enable that life to exhibit such distinctive properties as characterize all other bacteria, the field of microbiology promises to be as prolific in ever widening limits and new subjects for study as the science of astronomy. In the almost infinitely great and the infinitesimally little, analogous advance will open up new worlds.

MIXED INFECTIONS.

Because one microbe has gained a foothold in the animal economy is no reason why others should not also enter. Microbes of different families are not at all exclusive. On the contrary, most of them are very sociable and invite others in as soon as they find themselves not unwelcome. The weakening effect of one microbe serves to make it easier for others to gain entrance. In a number of diseases it is the secondary infectious agents that often prove of most significance in what regards the course of the case. In tuberculosis, for instance, especially of the lungs, the tissues whose vitality has

been seriously impaired by the tubercle bacilli fall an easy victim to other microbes. It is these secondary invaders that cause most of the disintegration of tissue in pulmonary consumption and give rise to the fever and night sweats, at least of the early stages of the disease. It is well known that the tubercle bacillus when alone very seldom causes any acute symptoms. A tubercular abscess in a joint may remain latent for a long time. It gives so few inflammatory symptoms as a rule that it is the custom to talk of this form of abscess as a cold abscess. Almost invariably, however, as soon as a cold tubercular abscess is opened up symptoms of hectic fever are noticed. Other microbes have got in through the incision and their toxines produce acute symptoms.

In diphtheria the secondary or mixed infections are almost more important than the diphtheria bacilli. It is the presence of these secondary infective agents that hinders the efficacy of diphtheria antitoxine in certain cases. The antitoxine serves only to neutralize the specific toxines produced by the diphtheria bacillus. The remedy has not the slightest modifying effect on the toxines of other bacilli that may be in the system. Simple diphtheria, unless malignant from the beginning, is not in our day, thanks to antitoxine, difficult to treat successfully, but diphtheria complicated by secondary infections still remains an insoluble therapeutic mystery.

VIRULENCE OF DRIED BACILLI.

One of the most interesting phases of recent bacteriological investigations has been the demonstration that bacilli retain all their virulence for long periods in spite of the fact that they have absolutely been deprived of all moisture. Typhoid bacilli have been kept for over two years in a drying chamber whence every trace of moisture was removed by means of chemicals, yet when inoculated into culture media it promptly proceeded to grow once more and had all its former virulence. Strings are dipped into liquid cultures containing bacilli and then hung up to dry. Even after over 100 days of this absolute drying process the bacteria are not killed, but only rendered comatose. This faculty of retaining life under these circumstances is very interesting from the biological standpoint. Usually when deprivation of water is brought about living protoplasm dies. The continuance of life among the bacteria shows that they can under unfavorable circumstances enter upon a seed or spore stage, during which, in the absence of moisture, though there is no multiplication, the vital potency remains ready to manifest itself as soon as suitable conditions become re-established.

This property of retaining life and virulence in the dried state is

extremely important because of the liability of microbes to be blown around in the shape of dust. Undoubtedly many microbes are thus widely distributed. Wind-borne epidemics of disease are, however, very rare. Once this was thought the principal way by which disease was propagated. There are, however, too many enemies to the microbe in nature to permit of their continued existence for long. Of these the most destructive foe is sunlight.

SUNLIGHT AS A BACTERICIDE.

Sunlight is the great germicide. Exposure of any microbe to full sunlight for a few hours suffices to bring on its almost inevitable destruction. Virulent tubercle bacilli especially are sensitive to the germicidal action of sunlight. Diphtheria bacilli rapidly lose their virulence when exposed for but a short time to the direct rays of the sun. In a hospital ward it has been found that the shutting out of the sunlight by close curtains predisposed to relapses of the disease. The manner in which sunlight effects microbes has been studied very carefully. We know, for instance, that it is especially the blue end of the spectrum that causes the destruction of microbes. Exposure to red or dark orange light has practically no deleterious effect upon microbe vitality. Red has even a favorable influence on some microbes. On the other hand, there are certain rays of light, for light they must be called, though they do not produce any impression of color upon our eyes, which are even more strongly germicidal in their action than are even the violet rays. These rays have been the subject of a great deal of study long before their special action on microbic life was recognized. They are known as the ultra violet or actinic rays. It is due to a large extent to their chemical activity that photography owes its success. They are capable of breaking up the silver salts and so produce photographic effects.

The explanation usually suggested for this mysterious action is that the wave lengths of these ultra violet rays of light bear some intimate relation to the wave lengths of the atoms of matter in the silver salts. This relation is such that wave interferences result and the constituents of the silver salts fly apart until compounds result, the excursions of whose atoms will not be interfered with by the waves of light. This same actinic power is supposed to force the atoms of bacteria from their combinations in the living protoplasm of the bacterial cells with the production of new chemical compounds incompatible with life. As a recent biological writer has put it somewhat poetically: "The sunbeams invite the bacteria to a dance in the glancing sunlight. The invitation cannot be refused.

For the microbes it is the dance of death. They literally dance themselves to pieces, and the millions of little tragedies can be seen accomplishing themselves all unsuspectedly in any stray beam of sunlight that wanders across our rooms."

The practical side of the question of sunlight as a bactericide is extremely important. It is after a succession of damp, sunless days that such diseases as influenza, pneumonia, rheumatism and that many featured disease, the "common cold," are especially prone to occur. Living and working in rooms to which the sun is unable to penetrate especially predisposes to their development. If the high building mania should continue life in large cities will become still more unhealthy than it is. In narrow streets the ten to twenty-story buildings, when they occur opposite one another, effectually preclude the entrance of nature's great scavenger—the silent, pervasive sunlight. The comparative mortality of city and country favors the country mainly for this reason. The difference threatens to become even more marked than it is. While the average of human life in large cities is scarcely more than thirty years, in the country it is nearer thirty-seven.

Nature has provided a most effective safeguard against a preponderance of microbic life, but man seems almost with malice prepense to set about the undoing of it. Living rooms when they have ample opportunity for sunlight are often kept constantly dark from week's to week's end by curtains and hangings. The shades of carpets and upholstery and the housewife's complexion must be protected from the deteriorating and revealing influence of strong sunlight. Fashion dictates the use of stained glass windows for staircase and corridor. Usually the yellow and red shades predominate. These colors absorb all the most efficient light rays and let pass only those that are but feebly germicidal. It is in corridor and staircase especially that the full play of bright sunlight should be encouraged. Here are brought direct from the street by those who enter all the microbes that are about. Here, too, the dust with its microbic contents is blown in and settles to be disturbed at every entrance and exit from the house.

THE TOXINES OF BACTERIA.

A great deal is heard of the toxines of bacteria in our day, and the question naturally arises, what are they? Bacteriology has not as yet fully answered this question, but much has been learned with regard to it in recent years. Every plant that grows contains some characteristic chemical substance which may be separated from other substances in the plant by suitable analytic methods. Sometimes

there is more than one characteristic substance. The vendor of proprietary medicines often vauntingly proclaims that his remedies are perfectly harmless because they are purely vegetable in origin. As a matter of fact, however, our most virulent poisons in medicine do not come from the mineral, but from the vegetable kingdom. Strychnine, the active principle of the Ignatia bean, and atropine, the alkaloidal principle of night-shade, are familiar examples. A still more powerful poison, aconitine, also vegetable in origin, is gaining wide notoriety at the hands of novelists and the daily newspaper. It is not a matter for surprise then that microbic plants also secrete intensely poisonous compounds.

When the investigation of bacterial toxines was first begun it was thought that they were alkaloids, just as strychnine, morphine, etc., are. Further investigation, however, shows that they are probably albumoses. This class of substance is a modification of ordinary albumin, but may be intensely poisonous. A poison recently investigated resembles the toxines of the more virulent bacteria quite closely. It is probably one of the last substances that would be thought of in this connection. Snake poison would be considered to belong to quite a different class of compounds. It is, however, like the bacterial toxines, an albumose. Albumoses are nearly all (there is a large series of them) distinctly poisonous. They occur at a certain stage of normal indigestion, and if anything hinders the digestion of food beyond this stage they may be absorbed into the system with the production of what is known as autotoxemia, that is, self-poisoning. It is the absorption of these incompletely digested substances that gives rise to the depression so often noticed in sufferers from indigestion. Fortunately the albumoses produced and absorbed during the course of disturbed digestion are never very toxic.

Many bacteria produce only mildly virulent albumoses, but some varieties, as the bacillus of anthrax, the tetanus bacillus, and, according to recent researches, the bacillus of tuberculosis, manufacture toxic albumoses of extreme intensity. Other vegetable poisons, as, for instance, morphine and strychnine, are feeble in comparison with these microbic toxines. The dose of any of these alkaloidal poisons required to kill, though usually not more than a grain or two, is simply enormous when compared to the minute quantities of microbic toxines that may prove fatal. The pure concentrated poisonous substances have been subjected to rigorous investigation of late years. Large quantities of microbes have been grown on favorable culture media and the toxines produced have been isolated from all merely adventitious material and carefully studied. The results obtained are almost appalling. Amounts of

material representing much less than 1-100,000,000 of the body weight of an animal may produce serious, possibly fatal, symptoms. As in the case of the microbes beyond the range of the microscope we are here dealing with problems whose main factors are beyond valuation by any of the crude scientific methods that we as yet possess.

Curiously enough there is a condition that develops in the human body itself without the intervention of microbes the symptoms of which bear many analogies with poisoning by microbic albumoses. This is sunstroke. Under the influence of long continued elevation of temperature, where there is no period of rest to allow for repair of the intricate mechanism of bodily metabolism (for it is after sleepless nights that sunstroke always comes) the system loses control of its chemical energies and a series of compounds are manufactured that act as intensely virulent poisons especially on the nerve tissues. This problem is as yet, however, too unsettled for discussion here.

PRESENT FOCUS OF BACTERIOLOGICAL ATTENTION.

A bacillus that has received great popular and scientific attention this last year or two is the bacillus of bubonic plague. This little plant seems to have been the special instrument of Providence on a number of occasions in the world's history for clearing the stage of undesirable elements and making human life simpler. As the evolutionist might put it, a renewed virulence of the bacillus pestis bubonicæ has been an important factor in the course of evolution for the removal of the weaker individuals in races whose degeneracy made the prospect of further development problematical. The plague or pest bacillus has been a substantial element in the rigid application of the great purifying principle of the survival of the fittest. There are traces of plague at least four centuries before Christ. The pestilence that overwhelmed Athens in Thucydides' time, carrying off nearly one-half the inhabitants, may not have been the bubonic plague. The Greek word that is used to designate it, λοιμὸς, may mean any epidemic disease, and Thucydides, a most acute observer, gives no hint of the occurrence of the glandular swellings so characteristic of the disease and from which it derives its name, "bubonic." There are sure traces of the disease in the fourth century B. C. It seems probable that the disease has existed from the very earliest times.

Within these last few years it has been found that there are three locations where bubonic plague is endemic, that is, where cases of the disease continue to occur in the intervals between great epidemics. These three nurseries of the undesir-

able plant leveler are situate, one in the neighborhood of Mecca, in Arabia; one at the foot of the Himalaya Mountains, in India, and the other on the shores of Lake Victoria Nyanza, in Africa, near the head waters of the Nile. It is from these three persistent foci of the disease that the great epidemics have taken their rise. The continued existence of plague in some part of India has long been suspected. Many of the great historical epidemics took their rise there. The fact that pilgrims from Mecca spread the disease not infrequently has been surmised at least for a century or more. It is only in our own times that measures have been taken for the enforcement of such sanitary measures as would ensure reasonable safety from the disease from this quarter. Even now, however, absolute assurance is not attainable. A number of the smaller epidemics in Asia Minor have been traced to this source. Only three years ago Professor Koch while on an expedition for the German Government in German East Africa discovered the existence of the plague focus on Lake Victoria Nyanza. From there certain hitherto inexplicable epidemics along the Nile and on the Barbary coast have had their origin.

The tracing of the sources of infection substantiates very well the position assumed by all bacteriologists that infection never originates *de novo*, but is always transmitted continuously through various media. A disease that has persisted for a long while in a neighborhood may become less virulent for the inhabitants of that neighborhood, yet may possess great virulence for people living under other conditions, people protected neither by heredity nor by the living conditions which may have rendered a special microbe comparatively innocuous. An epidemic, then, is a transplanting of the bacterial plant to soil where it flourishes with unwonted vigor. Such things are not unusual in zoölogy and botany. Rabbits introduced into Australia for purposes of sport became a national pest by the wonderful reproductivity they developed under the new conditions. The Scotch thistle introduced by some fervidly patriotic Scotchman became an intolerable nuisance demanding government aid for its limitation—eradication was out of the question. In the history of epidemics it is well known that a hitherto unattacked tribe or race may be practically wiped out by some simple contagious disease, certain cases of which are constantly present in civilized communities. Measles, for instance, always caused great mortality among our American Indians whenever it secured a foothold among them. Small-pox, next to fire water, has been the most fatal gift of civilization to our red brother.

Every now and then some bacillus finds a favorable soil in a new people, and then we have an epidemic. Often this epidemic does

not break out with all its virulence at once. It seems to acquire virulence by becoming accustomed to a people and their living conditions, and after passage through a number of susceptible individuals it acquires an infective power which enables it to affect those who were able to resist it at the beginning of its career in a particular place. This mode of action seems to be particularly characteristic of plague or pest bacilli. Usually a few scattered cases of the disease occur in a country. At first it does not spread beyond those in immediate contact with patients first affected. Then there is a subsidence of virulence that lulls into inactivity the startled efforts to root out the disease. Sporadic cases occur for some time, and then there is a sudden lighting up of epidemic virulence.

We have not had a serious epidemic of plague in civilized countries since the beginning of the last century. About five years ago in India the affection began to spread epidemically. Despite all the assurances given by Indian sanitary authorities that it could be effectively controlled, plague has continued to exist ever since on the Indian peninsula in epidemic form. It spread thence to various parts of China. Then it scattered itself along the commercial routes from India. It invaded Mauritius; it reached Manila. The world was startled by hearing of its occurrence in Alexandria last year. A few months later came the news that plague had succeeded in gaining a foothold in Europe at Oporto. From here it crossed the ocean to several South American cities. Then it was heard of at Honolulu. The Australian cities began to suffer from its ravages. Finally it turned up in the Chinese quarter of San Francisco. In none of these localities are we sure that it has given up its hold. All this recalls the insidious way of the disease before a great epidemic, and there is serious question whether we may not be on the eve of such an event. Certainly the test of the efficacy of our vaunted sanitary measures for the prevention of disease is now at hand. The next year or two will decide whether our sanitary science is sufficient to protect us against one of the oldest and cruelest enemies of the race.

BACILLI AND EVOLUTION.

Microbiology has attained not a little of its interest for biologists because it exemplifies in their simplest expression a number of the great principles which underlie the life history of all living beings. Behring, the discoverer of diphtheria antitoxin, called attention some years ago to the fact that certain important questions in heredity and evolution might be best studied in bacteria. When a generation lasts a scant half hour and the scientist has the oppor-

tunity to study not a few, but millions of successive generations, and when he can submit these successive generations to the most varying influences by changes of nutrition, temperature, conditions of moisture and all the other elements that make up plant environment, it is to be expected that he will be able to elucidate many of the problems connected with environment and heredity. So far at least, however, such expectations have not been realized. Bacteria of one genus persist in that genus despite the changes of environment to which they may be subjected. At most certain unimportant modifications in their extrinsic qualities are acquired and the microbes invariably recur to their original form and properties when placed under favorable conditions.

The bacillus of bubonic plague, for instance, produced the characteristic symptoms of plague as we know it to-day some 2,400 years ago. Countless generations of the bacillus have come into existence since then, but each has had all the qualities of the pest family of bacilli. The bacillus was not discovered until our own day, but it has been faithfully propagating its species in active obscurity for some thousands of years. If there is an evolution in all living things we might surely expect to find plague quite a different disease to-day from what it was originally and conclude that the bacillus would have developed into quite another form.

Now the bacillus of plague has been doubling every hour or so, even allowing for long periods of quiescence, for quite 2,000 years at least. The number of generations reaches up into figures of which the human mind can form no conception. If the bacillus still remains the same as it was, it seems clear that while evolution may be possible there exist certain stages in development at which organisms become absolutely fixed and further progress does not take place. In the case of the bacteria it can scarcely be argued, as it is for the higher beings, that the few generations we know anything of are inadequate to form the basis of a judgment as to the influence of environment on living beings.

MICROBES THAT ARE NOT BACTERIA.

How little arguments from analogy amount to in the etiology of disease is rather strikingly shown by the history of the investigation into causes of malaria. Malaria is a febrile disease, infectious in nature with many resemblances to the other infectious fevers. The periodic fevers, with intervals in which there is no fever, recall certain infections after wounds and surgical operations when intermittent chills and fever occur. This periodic febrile course is also noted in consumption, in which there may be no rise of temperature in the morning and considerable fever in the afternoon. It might con-

fidently be expected then that malaria would be found to be due to some form of bacterium.

As a matter of fact several form of bacteria were described by Italian observers as occurring in malaria. Laveran's observations in Algiers, however, showed that the cause of malaria was of quite a different nature to bacteria. While the bacteria are vegetable or plant organisms that grow by division of individual elements, the malarial germ is of animal nature and requires periodic conjugation in order to go on with the process of multiplication. Of course the plasmodium malariæ, as it was called originally, or the hœmatozoon Laverani, *i. e.*, the blood animal of Laveran, is very low in the animal scale. It is difficult to distinguish between plants and animals at this stage of development. The name protistæ has been suggested for these unicellular plants and animals that have so many characteristics in common that it seems needless refinement to separate them. Distinctions exist, however, and can be found on careful search.

The interesting feature of the malarial parasite is the recent discovery of the fact that a certain form of mosquito is its host as well as man. The theory of the mosquito borne origin of malaria had been suggested at various times for a century. We owe its enunciation in definite form, however, to the penetrating intuition of Dr. Patrick Manson, of the British Indian service. Before a single confirmatory observation had been made Manson elaborated the idea that the malarial parasite had as intermediate host in the course of its distribution from man to man the mosquito. After the event it seems hard to realize that some such theory was not formulated before Manson's time. Malaria is not contagious in the sense that it will spread from bed to bed in a hospital ward. It is essentially a disease of locality. It can be conveyed, however, as has been proved experimentally by the inoculation of blood from patients suffering from malaria into healthy individuals. The next step in the theory, the realization of the agency of the mosquito in the matter, seems inevitable. The mosquito in infected countries feeds on malarial patients and afterwards on those not suffering from the disease.

Manson's theory was soon substantiated by Ross' observations. Ross showed that the malarial parasites penetrated the stomach walls of the anopheles mosquito, multiplied, wandered into the salivary glands of the insect and then from there were inoculated into human beings at the time "the odious creature presents his bill." The life habits of the mosquito have now been carefully studied. They confirm Manson's theory and add weight to Ross' observations. The insect does not sting during the day, but preferably just at nightfall. As is well known in malarial countries,

this is the most dangerous time for the unacclimated to be abroad. The mosquito will not thrive at a temperature much below 70 degrees, so that malaria does not break out anew during the winter time and does not occur at all in cold climates. The mosquito requires stagnant water for breeding purposes, and so the neighborhood of swamps is very naturally a favorite haunt of malaria. Careful investigation for the last three years has not enabled ambitious and acute searchers to find a single locality where malaria exists and the anopheles mosquito is absent. By protecting themselves carefully against mosquitoes men have been able to live in the most malarial districts, in the Campagna at Rome, in the dreadfully malarial district around Albanella, southeast of Naples, which has had an evil repute ever since early Roman times, and where the newcomer practically never failed to contract the disease in a virulent form.

The mosquito theory of malarial distribution has become the mosquito doctrine. Now that we know the cause of the disease it will not be difficult to prevent its spread. First the mosquitoes will be limited by the drainage of swamps and all stagnant water; second, all malarial patients will be protected from the approach of mosquitoes by netting and other precautions. If the mosquitoes do not become infected themselves, they cannot convey the infection. Malarial parasites do not originate *de novo* in the mosquito, but are generated only by their kind. Then, too, all malarial patients will be cured as soon as possible by the free use of quinine, which it is known kills the parasites in the human circulation and so limits the opportunities for the spread of the infection. Third, those who enter a malarial country will protect themselves by mosquito netting from the stings of the insects—this has been effectually done under trying circumstances—and so will not be inoculated with the malarial parasites.

The prevention of malaria and its eradication is probably the greatest blessing that could be conferred on the human race at the present time. Millions of acres of fertile land in the southern part of the temperate zone that now lie useless and barren, or are imperfectly cultivated because of the dangers of malaria, would be restored to man's use. Practically the only reason why the white race is unable to withstand living in the tropics is not the heat of the sun, but the danger from malaria. The eradication of the disease would open up the tropics to colonization and give unlimited opportunities for the spread of civilization in countries as yet in a state of barbarism.

THE NEW MICROBIOLOGY.

Even the slight discussion of these few headings from present-day microbiology that our space allows shows how broad are the

limits of the new science that has actually been born and reached its development in the last few years. Bacteriology is by no means the narrow study of disease germs that it is often considered to be. It is a most helpfully promising science for the race. Within it are to be found the principles on which the avoidance of disease must be effected. Already it has made the work of sanitation definite and taken its practice out of the realm of the merely empirical. Very few realize how much this is accomplishing in lengthening the average of human life. There are said to be alive in London to-day over one-half a million of people who would not be living if the death rate that prevailed fifteen years ago obtained up to the present time. The average length of a generation of the human race has not increased, but there are certain factors at work that would have made it even shorter than it is if sanitary bacteriology had not come in to prevent it. This is the time of great cities and great cities are wasters of life. It is where men are crowded together in large masses that death rates are high unless every precaution is taken. City death rates would be much higher even than they are but for bacteriological progress.

Besides this practical aspect the new microbiology is of interest because of its relation to other sciences. The study of toxine and antitoxine is bringing new light into the intricate mazes of organic chemistry. The changes produced in the various animal tissues by the presence of microbes and their toxines is making clearer some of the difficult problems of physiological chemistry. The cellular changes induced in various organs are teaching new details in physiology and helping us to understand mysteries in pathology. Something has been said of evolution and microbes, and there are other important questions of general biology on which light may be thrown by bacteriological investigations. The unicellular organisms represent life in its simplest form. All living things are aggregations of cells, so that the fundamental problems of life remain the same for all beings. The changes brought about by environment may be studied in their simplest expressions in these minute organisms. In a word, the new microbiology rules a microcosm whose laws are as interesting as those of the visible universe all around us. Every discovery made will have a significance beyond the limited sphere in which it is found. The despised microbe, abused of the quack and writer of funny paragraphs, may yet prove the key that will unlock hitherto incomprehensible mysteries in the realm of living beings.

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SAINT ENNODIUS AND THE PAPAL SUPREMACY.

GLOOMY and ill-boding were the auguries, poignant and desolating the scenes of grief amid which the year 500 was ushered in at the capital of the Christian world. Often before, no doubt, had the impious hands of ruthless persecutors placed a crown of sorrows on the fair brow of Christ's Church; but such cruelties and insults had mostly her avowed and detested enemies for their authors. Now she is wounded close to her very heart by professing friends, and the gaping rupture threatens her divinely-assured existence. A saintly and cultured Pontiff has been duly installed in the chair of St. Peter, and he is intensely loved by the great majority of his spiritual children. But that disrupting and paralyzing curse of Christendom, an Antipope, has fallen heavily, with all its pestiferous accompaniments, on the clergy and the people of the Sacred City, and has spread its abominations of intrigue, distrust, hatred and even murder everywhere, from the hallowed precincts of the churches and the renowned assembly of the Senate, to the lowest dens of infamy and the resorts of perjured slaves. Schism, in all conditions, is an evil of measureless mischief and malice; it saps the foundations of charity and makes wicked or deluded minds insensible to the ennobling influences of religion; it is an unnatural rebellion of selfish and stubborn children against a loving mother. Heaven stamps its progress with the unmistakable brand of reprobation, in the enormities that never fail to follow in its wake, and frequently visits its authors and fomentors with summary and shocking chastisement. But schism undisguised and foully aggressive, pacing the very sanctuaries and mounting the altar steps of the apostolic basilicas and threatening even to seize upon the Papal throne; schism, the outcome of an infamous bargain between the Eutychian Emperor Anastasius and the intriguing courtier Festus, to have the insidious and heretical Henotikon foisted on the acceptance of the bishops, priests and faithful by the purchased efforts of a pliable Pope; schism which bespattered the pavements of Rome with the blood of holy priests and devout laymen—such a schism, lasting for four years, was the direst culmination of all the indignities and terrors that the Church had yet been subjected to. True, even if the Almighty, in His inscrutable wisdom, had permitted the designing and unscrupulous pretender to establish himself in the chair of the Supreme Pontiff, Christ's promise would have still safeguarded the

See of Peter and the utterances of his successor against the contamination of heresy, however unworthy that successor might be of the exalted office and terrible responsibility thus recklessly undertaken. A signal example of such manifestly miraculous intervention of the divine power is presented in the somewhat analogous case of Vigilius, who is alleged to have secured the favor of the court of Constantinople by a nefarious compact with the Empress Theodora, to have received and dealt out enormous money bribes in order to gain support in his disreputable candidature for the Papacy, and to have been a guilty accomplice in the imprisonment and starvation of Pope Silverius. Yet from the first moment when he was recognized as Bishop of Rome and Supreme Pontiff all his pronouncements were rigidly orthodox, and his stand in defense of the true doctrine was staunch and fearless. But when the faith and the flock are threatened the pastors must recognize the stern necessity of obeying their Divine Master's command—*Vigilate.* The guardians of the priceless deposit of faith could not fold their arms and look idly on while a dastardly and corrupt combination was being organized to tamper with that heavenly treasure, to dislodge the divinely constituted Vicar of Christ, and to plant the false oracle of heresy in the chair of incorruptible truth. "The good shepherd giveth his life for his flock;" the wolves have entered into the sheepfold and must be expelled at any sacrifice. Nor is it bishops alone that are bound to defend the faith from injury and alloy. "He that will confess Me before men, him shall I confess before My Father who is in heaven" embraces every individual believing in Christ.

That the clouds of error and the storms of fierce conflict were soon put to flight, and that the spotless Spouse of the Redeemer emerged from the cruel ordeal with undiminished vigor and in all her pristine lustre, was the unfailing effect of the divine promise: "Behold I am with you all days even unto the consummation of the world." "Thou art Peter, and upon this Rock I will build My Church, and the gates of hell shall not prevail against it." To meet such terrific crises God Almighty ever raises up some indomitable defender of truth, some intrepid champion of the rights and discipline of our holy religion, who carries the standard of the true faith unsullied through the stormiest struggles until a sweeping and decided victory restores peace and gives a new impulse to the activity of the Church. In the overwhelming troubles that darkened the dawn of the sixth century the hero of the strife and the triumphant upholder of the Papal prerogatives was Ennodius, to whose enlightened and noble championship history has accorded but a tardy and inadequate acknowledgment. Thirteen centuries and a half had rolled by, from the death of this illustrious scholar and saint, before full and well merited promi-

nence, in the view of the whole Christian world for all time, was conceded to him by the Ecumenical Council of the Vatican. There his teaching and his theses on the supremacy of the Holy See received the highest conceivable sanction of infallible approval, and his name was bracketed with those of Leo the Great, Athanasius, Cyril, Gregory the Great, Avitus and, in modern times, Alphonsus Liguori as a brilliant defender of this revealed and no longer debatable truth. The learned Baronius is enthusiastic in his just praise of the author of the "Apologia:" "His words deserve to be engrossed in letters of gold on that dark page in the Church's history."

Pope Anastasius, in the year 498, deputed two cultured and trustworthy bishops to accompany to Constantinople Festus the Patrician, who was proceeding to the imperial court on affairs of the State. These prelates were the bearers of an important Papal letter addressed to the Emperor and imploring him to dissociate himself from the partisans of the late patriarch, Acacius, who had gone to his final account under the anathema of the Church, and to return to that warm and pronounced allegiance to Christ's vicar which he had so constantly displayed before his accession to the throne. So far was the Emperor from permitting himself to be gained over to the cause of religion that he even succeeded in securing from Festus a solemn undertaking to use all his powerful influence, in the church and at court, to have the Henotikon adopted and approved by the Pope and the Western bishops. This Henotikon, it will be remembered, was a most seductive document, drawn up by Zeno at the dictation of Acacius, professedly in the interests of peace and union, but implicitly heretical, since it ignored the Ecumenical Council of Chalcedon.

Before the return of Festus, however, Pope Anastasius had died, and already speculation was keen on the subject of a successor. Festus saw that if his unworthy projects and schemes were to have any chance of success it would be by the election of a Pope who would owe his elevation to his support and who would promise him to effectuate his engagements to the Emperor. On the 22d of November, 498, the Archdeacon Symmachus, a native of Sardinia, and attached to the Constantine Basilica or St. John of Lateran's, as it was afterwards called, was duly consecrated Pope in that church, having been elected, according to custom, by the vast majority of the clergy and people. But Festus had utilized with effect the short interval from his return, and in the words of Nicephorus quoted by Baronius, "he had corrupted a certain number of the clergy who gave their votes to Laurence, a Roman priest." Thus there were two consecrated, the deacon Symmachus, elected by the larger number (and already promoted to the priesthood), and Laurence, supported by

the minority. On the very same morning, while the true Vicar of Christ was receiving the episcopal ordination and Apostolic commission as Bishop of Rome and Supreme Pontiff of the Universal Church, the turbulent and corrupt schismatics were setting up a rock of scandal by the uncanonical and criminal consecration of the Antipope in the Basilica of St. Mary Major. Festus was in the zenith of his power; he had just delivered to Theodoric the Emperor's official letter under his great seal, recognizing his status as King of Italy. Though he had been already acknowledged as such by his own Ostrogoths and by the conquered Italians, this formal acknowledgment of his royal dignity by the Emperor of the East added a fresh lustre to his power and prestige, while it removed all fear of molestation. To Festus, as the trusted bearer of this important message, enhanced importance and increased influence naturally accrued, and he was not slow to improve the opportunity thus offered by representing that he was commissioned by the Emperor to endeavor to heal the religious differences that distracted the churches of the East, and to bring about a clear understanding and perfect harmony between the East and the West, Constantinople and the Holy See. Owing to the praiseworthy and urgent nature of the momentous task he professed his anxiety and power to achieve, he succeeded in deluding, by false pretences, many holy ecclesiastics; bribery was a more potent weapon to overcome the objections of the less upright.

The ecclesiastical histories deal with this critical conjuncture in the affairs of the Church in so confused and misleading a manner that it is only by a careful comparison of the Letters of Ennodius on the subject that we can arrive at a clear conception of the sequence of events. For instance, we are informed that the schism continued for four years, and in the next sentence or so it is stated that both sides in the prolonged dispute agreed to submit their jarring claims to the arbitration of Theodoric. Both these statements are undoubtedly accurate, but it was *immediately after the election* that the joint appeal was addressed to the King, praying him to intervene and promising cheerful submission to his judgment. The following are the words of the *Liber Pontificalis:* "After a long discussion the rival parties agreed that the two Pontiffs should go to Ravenna to submit their case to the judgment of the King, Theodoric. The equitable principle enunciated by the King was this: 'The Apostolic See belongs by right to him who was first ordained or who obtained the larger number of votes.' His opponents could not resist manifest facts, and it had to be admitted that Symmachus had received the majority of votes. He took possession of the chair of St. Peter." This obviously just decision did not, however, crush the revolt or

restore tranquillity. Open resistance was abandoned for dark conspiracy and squalid calumny.

All this took place during the winter of 498, and in March, 499, a council was convoked by order of Symmachus, under whose presidency as undisputed Head of the Church 72 bishops, 67 priests and 5 deacons assembled in St. Peter's Basilica. The decrees of this council are followed by the signatures, first, of the Supreme Pontiff: "I, Coelius Symmachus, Bishop of the Holy Roman Catholic Church, have subscribed these synodal decrees, approved and confirmed by *my authority;*" in the second place, by the bishops; and, thirdly, at the head of the list of *priests'* signatures, appears that of the Antipope: "I, Coelius Laurence, archpriest of the title of Saint Praxedes, have subscribed, with my full consent, these synodal decrees, and *I swear to remain faithful to them.*" We shall see how lightly this solemn oath sat on the conscience of the arch-disturber; but the direct aim of our narrative and the order of the salient facts demand that we should first briefly review the motives and manner of the advocacy of the Papal rights by Ennodius, whose historic oration was not the only testimony of his whole-hearted zeal. He threw himself into the contest from the very outset with a devotedness and perseverance that obstacles and dangers were powerless to shake or thwart.

Magnus Felix Ennodius was a native of Arles, where he first saw the light in 473. His family, like most of the nobility of France in those days, was connected with many illustrious houses of Rome and of other cities of the now fallen and dismembered Empire. While still very young he was taken to Milan by a rich aunt who resided there and by whose generosity his gifted mind received all the available advantages of a splendid education. If we accept as unexaggerated recitals of facts his somewhat startling accusations of himself in a work framed on the model of St. Augustine's Confessions, we can hardly regard his boyhood as a fit prelude to that after life of sanctity and self-sacrifice that has gained for him an honored place on the Calendar of Saints. He inherited his aunt's attenuated fortune, which was so notably augmented by the dowry he received with the lady he married while he was but a little over 16 years of age that he describes this latter accession to his material wealth as incomparably greater than what remained of his aunt's property and legacies. *Ex mendico in regem mutatus sum.* At 20 he was attacked by a malignant and lingering disease which was the turning point in his life. His wife entered warmly into his new views and showed her earnestness by embracing the religious life and entering a convent forthwith. Ennodius devoted himself with characteristic ardor to a thorough preparation for Holy Orders, and received deaconship at

the age of 21. Laurentius, Archbishop of Milan, then entrusted to him the supervision of the hospitals, the care of the poor of the city and the management and custody of the Cathedral revenues. In addition to these onerous and engrossing duties, he conducted a most successful school, mainly frequented by the youth of the aristocracy and including in its programme the humanities and the rudiments of the art of eloquence. He became Bishop of Pavia in 511, was twice employed as Papal Envoy to Constantinople and died in the prime of life in 520. His memory is honored by the Church on the 17th of July, the anniversary of his edifying death. Popes Nicholas the First and John the Eighth speak of him as the "great" and "glorious confessor."

To justify the character and to appreciate the value of Ennodius' well directed efforts in the early stages of this momentous contest between Pope Symmachus and his unscrupulous rival, it is necessary to consider the disorganized and venal condition to which civil and judicial administration had been reduced by the recent civil wars. Thierry assures us that the improbity of judges was so general that the vice had to be reckoned with in all important cases; and Ennodius himself, though in his profession of advocate at the public bar, which he followed for many years, he never accepted briefs in any but transparently just cases, often found what we may bluntly call bribery of the unfriendly judges a regrettable necessity. With this ungainly aspect of public morality we are not brought into immediate contact, fortunately, in this bitter and protracted struggle; but we can very easily infer from the spirit of venality that everywhere prevailed how necessary it was to have abundance of money at ready command to purchase the good offices of the needy courtiers at Ravenna in order to secure a satisfactory hearing from the King. When the ready cash at the disposal of Ennodius out of his own personal resources was exhausted by the enormous expenses of which we shall learn more as we proceed and on gratuities of the nature just indicated, his credit as the owner of immense property and of an honorable name was sufficient to cover as a guarantee of repayment all the advances that were needed.

The Pope, on the other hand, stood in a position of helpless penury, the chief sources of revenue to the Roman churches being in possession of his reckless adversaries. It is touchingly edifying, however, to observe from the statements of Ennodius that the Holy Father, in the midst of all his anxieties and the most pressing demands for money to meet expenses incurred on his personal account, never permitted to be touched the small but sacred reserve which he retained in inviolable trust for the deserving poor. Even now, after the lapse of 1,400 years, those energetic and withal graceful letters

of Ennodius to the Deacon Hormisdas, who afterwards filled with dignity and distinction the Papacy he was now defending against faction and fraud, and to the upright and scholarly Luminosus, who acted in the capacity of chancellor to the Pope, are replete with interest and instruction. At first blush a forcibly worded appeal to the Head of the Church to discharge money liabilities contracted on his behalf and with his knowledge suggests a scandalous laxity in a quarter where the whole world is to look for guidance in example as well as in word, especially in reference to admitted claims of justice. The writer very properly defends the urgency of his repeated applications on the ground that it is Laurence, the Bishop of Milan, that is pressing for repayment, and he even goes so far as to say that he is prepared to fully reimburse that prelate out of his own pocket if all else fail. We must remember that the abnormal exigences of the Pope's hampered position amply warranted a delay; and, secondly, that the guarantor nowhere expresses a doubt as to the demands of justice being satisfied in the end. The amount of which there is question in the following instructive quotation from a letter to Hormisdas was due to Ennodius himself, but is not very urgently demanded back:

"Some short time ago, while we were overwhelmed with anxiety and were still uncertain of the favor of our pious King and in doubt as to the judgment he might pronounce on the accusations with which the Pope was charged, I handed over all my numerous camels to you to be given to His Holiness the Pope, with this stipulation, that if the animals themselves were not necessary (presumably for conveying the Papal equipage from Rome to Ravenna) their value should be realized and their price, as fairly estimated, be restored to me. Independently of this transaction, His Holiness is fully acquainted with the fact that, to the very best of my ability, I have on all occasions relieved, at your request, the pressing needs of our holy Roman Church. In return, kindly do me the favor of recalling to the memory of the Pope, just now, the facts of the negotiation I allude to. I would request you also respectfully to make known to me the result of your interview. I have every confidence that neither the Pontiff of the Apostolic See nor you who worthily discharge the office of intermediary can entertain on the question any other views or intentions than such as are in consonance with our stipulated agreement and with justice."

This modest and diffident epistles sheds a flood of light on the devotedness of our Saint to the Holy See; almost single-handed and at enormous risk he sacrificed his peace of mind, he expended all his money, mortgaged his vast estates, devoted his brilliant talents and staked his wide popularity and distinguished name in the disinter-

ested and weary work of defending the rights and liberty of the Supreme Pontiff. It is with a heavy heart and a keen sense of the cold ingratitude of the Pope's *entourage* for all his unsparing efforts and lavish expenditure in the sacred cause with which their sympathies and interests were so closely bound up that he pens the scathing but just reminder: *"Cui mos est pia jugiter facere, justa non despiciet, et qui largitur proprium aliena non subtrahet."*

In a letter to Luminosus he further discloses to us, by a palpable and concrete illustration, the endless exertions he had made, and this statement he writes in no boastful or glory-seeking spirit, but from sheer compulsion: "Both through my communications and directly from the mouth of our revered Bishop of Milan himself you have been made aware that he claims the repayment to him of those sums that were expended at Ravenna in the interest of our Holy Father. This expenditure, absolutely necessary to meet the requirements of the case, exceeded in the aggregate 400 gold pieces, distributed in varying sums to influential personages whose names it would be impolitic and wrong to disclose. Now, these large amounts were advanced by my bishop, Lawrence, on my personal security; and I cannot reconcile myself to appearing in his presence with unabashed boldness until I shall have obtained, as I have every confidence I shall obtain, through your kind offices and mediation, a thorough fulfilment of the promises given. Should you think my claim either extravagant in itself or disrespectfully asserted, then I shall discharge out of my own resources every fraction that the revered bishop has been good enough to advance, and for the reimbursement of which I alone am bailsman. I hold in my possession the Pope's letter, wherein he authorized all necessary expenses to be defrayed under my note of hand." It is consoling to reflect that, slender as were the revenues and impoverished the exchequer of the Holy See at this trying crisis, the principal at least and probably the interest, too, at the current rate had been duly discharged in the interval between the date of this last quoted letter and that of his application to be indemnified for the sale of his camels and for expenditures of his own money. But numerous were the messages and urgent the appeals on each of three occasions at least conveyed by a confidential courier, who was to bring back the coin, before the heavy debt was liquidated. In turn he invoked the aid of Luminosus, Hormisdas and the Deacon Dioscurus to give effect to his demand. To Luminosus he addresses language of piteous entreaty: "You promised that the repayment of these necessary expenses advanced by your request would be forthcoming without any avoidable delay; but, in punishment for my faults, some hidden destiny has always interposed an obstacle. The Bishop importunes me with

such urgent pressure that he scarcely allows me time to despatch a special messenger to the Holy City. After God, the matter is now in your hands."

The second projected visit of Symmachus to Ravenna to counteract the effect and to demonstrate the groundlessness of the filthy charges trumped up against him, as he had already appeared there with striking success to defend the validity of his election, must have taken place in the winter of 499, if the design was ever carried into execution. That ample means were provided for that express purpose we know, and that the ministers and courtiers at Ravenna were kept posted on the nature and extent of the foul means adopted by the partisans of the Antipope to compass their nefarious designs we likewise know. But we are not in possession of such explicit statements or precise data as would justify the assertion that the visit actually took place. Two important and undeniable facts point in the opposite direction; the appointment of a visiting bishop to investigate the charges in the beginning of the year 500 and the visit of the King himself in the September of the same year. The malcontents did journey to Ravenna to prefer their calumnious charges, and succeeded in carrying their point for the time. They convinced the King that they were proceeding according to the requirements of Canon Law and were easily able to adduce instances in which the Pope had himself appointed a visitor to take cognizance of charges alleged against bishops. What the Supreme Pontiff had put in force against others they argued he could not object to submit to himself. The King, being himself an Arian and only superficially acquainted with the constitution and ordinances of the Catholic Church, was in good faith convinced of the seeming reasonableness of their contention. Thus was the Roman Pontiff sought to be placed on the same level with other bishops, which was a direct and emphatic denial of the supremacy of the Holy See. All the unwearying vigilance and energetic precautions of Ennodius failed to prevent the tricky intriguers from snatching this far-reaching concession from the unsuspecting King. Had the case been presented with that lucidity and cogency of reasoning on behalf of the Pope that Ennodius displays in his Apologia, even a temporary triumph could not have been scored by his opponents thus, seemingly by chance. But *chance* is a pseudonym and a misleading one; it was by a wise and happy disposition of Providence, who can ever make passing evils the occasion of lasting good. It was to this event that the immortal "Apologia" owed its origin; and it was this event and its immediate consequences that opened the eyes of the bishops of the world to the glaring outrage of subjecting the recognized successor of St. Peter to such an indignity and injustice; and it was this

event that drew from Avitus and the other Bishops of Gaul their noble and memorable protest.

It is important to observe that there were as many as five councils summoned at Rome in connection with this calamitous struggle. The dates of the councils enable us to fix, with tolerable accuracy, the time and duration of most of the other incidents. We have seen that the first of the assemblies met on the 1st of March, 499. Of this council two canons are extant and incorporated in the legislation of the Church. They are both conversant with Papal elections, and enact the extreme penalties of deposition and excommunication against priests, deacons or inferior clergy who enter into cabals or adopt corrupt means to further the cause of any aspirant, and they seal with the Church's approval the wise principles followed by Theodoric in favor of the majority of votes. At the close of this council the too indulgent Pontiff canonically appointed the hypocritical Laurence to the bishopric of Nuceria; and we gather from Ennodius that, concealing his unsatisfied ambition and his dark designs, he departed from Rome and took possession of his see. It is pretty obvious that the new and execrable trick of endeavoring to oust the legitimate Pope by bringing against him vile, calumnious charges must have been started and worked with malignant persistency from the very moment of the Antipope's departure from the city. For Baronius and other reliable authorities prove to a demonstration that a second council, of which the acts have not been preserved, was held soon after Easter of 500, and that the visitor and Antipope were there deposed and excommunicated. It was, therefore, in the winter of 499 that, yielding to the entreaties of Faustus, Probinus and many other influential personages, the King approved of the nomination of Peter, Bishop of Altinum, to inquire into the alleged charges. The Liber Pontificalis has the following summary:

"Some intriguing clerics and certain Senators with Festus and Probinus at their head formulated an indictment against Symmachus and suborned false witnesses, whom they sent to Ravenna, there to make their depositions. In the meantime they secretly recalled Laurence and published throughout Rome the various articles of the impeachment. The schism was revived; some of the clergy adhered to the communion of Symmachus, others to that of Laurence. The Senators Faustus and Probinus addressed an appeal to the King and employed all their efforts to obtain from him that he would appoint a visitor to the Apostolic See. The King named Peter, Bishop of Altinum, for that office—a measure opposed to the canons."

The visitor was expressly directed in the commission given him by the King to report himself to the Pope directly on his arrival in

Rome, but instead of doing so he at once publicly identified himself with the party of revolt, forgetting his official character of impartial judge as well as his duty as a bishop in communion with the Holy See. "It was, undoubtedly," says Ennodius, "the King's explicit desire that the visitor should bring to Rome not dissension and discord, but harmony and peace. He clearly foresaw that if he did not fortify this unfortunate man with the most precise instructions for his guidance, the contagion of your envenomed artifices would soon make of him a corrupt supporter of faction. Because it is written: *The simple man believes in every word.* Consequently he defined for him a line of conduct and imposed upon him a solemn obligation not to deviate from it. These instructions directed the visitor to present himself at the Basilica of St. Peter's as soon as he would have reached the city of Rome. This was nothing more or less than to embody in a royal order the wishes of the Holy Father himself. Who, then, would have conceived for a moment that a bishop, even if the secular authorities had forbidden it, would have failed to conform to those pious rules and customs that the prince himself did not believe himself exempted from complying with? The visitor was bound to pay his respects to the Pope and to request him in a personal interview to deliver over his slaves; he was bound to give him an undertaking that the said slaves would not be put to the torture, but would be kept in safe custody to be heard by the council in the process of the investigation." These slaves belonged to the Pope's household, and were alleged by his accusers to be in possession of incriminating information. "From the very beginning of his mission this visitor was circumvented by intriguers and, so far from being a messenger of peace, was transformed into a brand of discord. Without so much as the formality of a visit to St. Peter's—*invisis beati Apostoli liminibus*—he gives himself up to be blindly conducted by the caprice of your fury; and that temple—the centre of strength and authority for all other churches—which attracts the faithful from all corners of the earth; that temple your visitor passes by close to its very porticoes, but condescends not to enter. He, a mere commissioner of investigation, is too grand to approach the supreme court of the Church. That branch severed from the stem left no room for hope, from that instant, that it would produce good fruit. You have refused to permit your visitor to avail of the privilege of approaching those hallowed precincts, filled as they are with ennobling memories, fearing that he might perchance detach himself from your crawling errors if he knelt in homage before that august sanctuary of St. Peter's *confession.* You cannot, therefore, screen yourselves behind the royal authority which you have flouted in its very first ordinance; already doomed objects

of the wrath of heaven, you have merited in addition the severest chastisement from the King, whose explicit directions you have maliciously infringed."

The reader cannot fail to observe with what prudent deftness the accomplished orator contrives to extol the foresight and fairness of Theodoric, while at the same time he proceeds to show, with characteristic force of argument, that the appointment of a visitor by the King or by any other authority, civil or religious, was directly opposed to the canons and to the most elementary laws of the constitution of the hierarchy. As has been already remarked, the existence of a visitor with power to bring the accusations against Pope Symmachus formally before a council or so-called high court supposed to possess jurisdiction over him was an explicit negation of the Papal supremacy. But while he heaps compliments upon the King with royal profusion, though with cultivated delicacy, he is much more eloquent in his tribute of eulogy to the tomb of the Apostles. In contrasting the conduct of the visitor with that of the millions of pilgrims that come from the ends of the earth to do reverence to the Vicar of Christ and to reinvigorate their faith and zeal on the spot where Saints Peter and Paul preached the true doctrine and sealed it with their blood, he proposes the objection: "Perhaps you will say it is doing an injury to the dignity and power of those denizens of heaven to imagine that their influence is confined to any one particular place on earth." And he proceeds: "Prayer, it is true, is heard, no matter in what part of the world it is offered; the faith and devotion of the suppliant make the martyr present by knowledge wherever he is invoked. But who will venture to deny that the saints are more deeply loved in the land of their birth, or that they are more tenderly reverenced and more confidently invoked on the spot where they sacrificed their lives to be received into God's everlasting presence? Our Redeemer, I admit, makes the entire world the theatre of His stupendous miracles, but the countless crowds of pilgrims that throng to this glorious monument have invested it with unrivaled honor and prestige. He who can change carnal man into an angel can assuredly endow with special blessings one particular corner of the earth."

We are still quoting from the sublime and immortal Apologia, and as this is the most appropriate place to examine the answer of Ennodius to the argument that secured from the King his approval of the uncanonical nomination of a visitor, we shall give the orator's own statements and reasoning, even at the risk of making the quotation rather lengthy. The momentous character of the question at issue and the unanswerable cogency of the reasons adduced are, it is hoped, a sufficient excuse.

"The Pope, they argue, assigns visitors in case of other bishops, and common justice requires that he should be himself bound by the law of which he is the author. Let us see if that proposition can be defended in canon law. Now, I have no wish to accuse them of wilfully contradicting the known truth; I will not directly denounce them as liars. I will content myself with affirming that the legislator is *not* subject to his own law; if the prince is not above the laws that he enacts for his subjects, it is vain to invoke his authority to have these laws executed." It is the same line of argument as that of St. Thomas. No man can be subject to himself; hence his enactments can only possess for him a *directive* force; the *punitive* and *coactive* elements are wanting. It is this directive force that Ennodius designates the law written in the heart or conscience. "There remains for him the law of his conscience, a law written in the hearts of all of us and which fails not to direct the man who is exempt from all other laws. Of his own uncoerced motion he embraces that virtue with which no fear of punishment imposes upon him compliance. *When there is question of others, God has willed that they should be judged by their fellow-men; but in regard to the Pontiff of the Holy See, He has reserved the judgment to Himself in the most absolute manner. Sedis istius præsulem suo sine quæstione reservavit arbitrio.* It is the Divine will that the successors of Saint Peter should be amenable to heaven alone, and that they should bring before the Supreme Judge a conscience that no earthly authority has had jurisdiction to examine. If they are guilty, imagine not that they are exempt from fear; their own conscience and the ever-present Deity, whom nothing can escape, are constant witnesses of all their actions." They can say with David, *Tibi soli peccavi.*

"But, you will object, every man is in this position; he has his conscience to accuse him when he goes wrong and God to condemn him if he perseveres in his guilt. My answer to this is brief and conclusive: It was only to *one* man and his successors that the Divine Redeemer said: *Tu es Petrus, et super hanc petram ædificabo ecclesiam meam. Quidquid solveris super terram, erit solutum et in cælis.* I will add that the verdict of the saints since the foundation of the Church proclaims the dignity of the Pontiffs of the Holy See as an object of veneration throughout Christendom, since the universal fold of Christ is subject to it and lovingly accepts its sweet yoke. This see is named the central and the chief see of the whole world, and to Rome may be applied the exclamation of the prophet Isaias: *"If she is humbled, to whom will you have recourse? Where will you leave your glory?"*

These are some of the words that the learned Baronius very justly remarks "ought to be engraved in letters of gold," and our readers

will agree that their author deserves a more prominent place and higher praise than our historians have hitherto given him. A few of his hymns, especially the beautiful ode on the holy virgin Euphemia, are referred to with scant eulogy; we are informed that his Apologia was approved by the Pope and the Roman Synod and ordered to be inserted among the acts of the Council, and some of the unappreciative notices add that his style was labored and turgid. Thus is relegated to undeserved obscurity one of the most devoted sons of the Church since the days of the Apostles; an unselfish and powerful supporter of the Roman Pontiff by purse and pen, by material succor and by the gift of eloquence, in the hour of sore and trying necessity; a bright and shining light; a beacon on the hilltops of the distant past as a signal of the Church's infallible security. His conclusions have been crystallized into unchangeable dogma by the Vatican Council. "*Si quis dixerit non esse ex ipsius Christi Domini institutione seu jure Divino ut beatus Petrus in primatu super universam ecclesiam habeat perpetuos successores; seu Romanum Pontificem non esse beati Petri in eodem primatu successorem: anathema sit.*" "*Si quis dixerit Romanum Pontificem non habere plenam et supremam potestatem jurisdictionis in Universam Ecclesiam, non solum in rebus quæ ad fidem et mores, sed etiam in eis quæ ad disciplinam et regimen Ecclesiæ per totum orbem diffusæ pertinent; aut hanc potestatem non esse ordinariam et immediatam sive in omnes et singulas ecclesias, sive in omnes et singulos pastores et fideles: anathema sit.*"

A question will have naturally suggested itself to the reader before he has reached this stage of the proceedings: what were the charges preferred against the Pope? That they were worthy of the criminal gang that invented and propagated the calumnies he will have already suspected. In the histories, where even the most meagre account of the schism appears, it is surmised that one, and the one most dwelt upon, of the allegations accused the saint of leading a scandalous life. It is for this reason that his slaves are so frequently alluded to, as his enemies pretended that they could depose to the irregularity of his conduct. Now, a slave's oath was not accepted as conclusive evidence, according to the canon or the civil law of the day, unless the deponent was subjected to torture, and, naturally enough, the maligned Pontiff refused to hand over the slaves to be tampered with by his calumniators; but he voluntarily undertook to present himself, to allow the examination of every member of his household and to facilitate the acquisition of evidence in every way in his power when the conditions he insisted on as preliminary to his submitting himself to judgment were first fulfilled. The principal of the conditions was that the Papal estates that had been wrested from him by gross violence

and glaring injustice and the Church revenues and personal income that had been similarly seized upon and misappropriated should be restored to him, as he had been pronounced by the King and by the Council legitimate Pontiff and hence the rightful owner or administrator. In other words, he claimed that, in accordance with the canons, everything should be placed in *statu quo ante*, and that then he would answer all charges, however foul, that his adversaries might bring against him. We shall see that, at the King's suggestion, he waived even this reasonable and legal demand, and thus covered his calumniators with confusion and disgrace. Nor ought we to feel staggered by the filthy accusations hurled against this holy and pure ecclesiastic. St. Athanasius and many other saints before and since his day, men of angelic chastity, had to suffer cruelly for the time from similar nasty calumnies, but their terrific ordeals only added new gems to the glorious crowns that awaited them. A disappointed rival without a conscience is dominated by unbridled passions, and an Antipope most faithfully represents on earth the leader of the first rebellion in heaven. His counsel to his disappointed partisans is forcibly expressed by the great author of Paradise Lost:

> Our better part remains
> To work in close design, by fraud or guile,
> What force effected not; that He no less
> At length from us may find, Who overcomes
> By force, hath overcome but half his foe.

It is a singular and a striking fact that neither in the exhaustive reply of Ennodius nor in the acts of any of the councils are the counts of indictment particularized. But the cause of their silence is not far to seek; other allegations they would specify, but a charge of incontinence, however clearly disproved, they shrank from mentioning in connection with the Holy See or its revered occupant. Ennodius, in a very elevated and eloquent passage, alludes to "abominable inventions which ought to be buried in eternal oblivion," and to "accusations so scurvy that their very recital would defile the tongue and taint the atmosphere." And in another passage his eloquence is as telling in effect as it is sublime in conception; he introduces St. Paul as addressing to the accusers those apposite words of his Epistle to the Romans: "You accuse others of perversity, you who are yourselves filled with injustice, with fornication, with avarice, with malice and with envy; laden with murders, always ready to condemn, tricky and jealous. You remind us that nobody ought to hold communication with fornicators, and you are not ashamed to allow all the world to see yourselves in the company and train of the adulterer, Laurence, you vile instruments, which he uses at will to spread his poisons and to expand the area of infection.

And whilst you move in that pestilent company, while you carry the badge of that corrupt rebel, you impute it as a crime to the priests of the Lord to remain attached to the old communion. You pretend to judge us culpable in communicating with a Pontiff whom you have accused no doubt, but whom not an atom of evidence is forthcoming to convict, while you yourselves associate with a man whom the Sacred Scriptures smite with a two-edged sword." These passages leave no room for reasonable doubt as to the nature of the imputations, and the inference they so clearly suggest becomes perfectly irresistible in face of the fact that Pope Symmachus himself, hoping to save others equally guiltless from such foul accusations, got a most extraordinary decree passed in solemn council immediately after peace had been restored, and insisted on its being observed rigidly not by bishops alone, but by priests and deacons as well. In its original form it was devised to safeguard the character of bishops only—*Præceptum quo jussi sunt omnes episcopi cellulanos habere.* The Bishop of Milan, in a pastoral letter, which Ennodius mentions and quotes from at great length elsewhere, expressly states that this surprising legislation had been dictated by motives of prudence, in consequence of the calumnies to which the Pontiff of the Apostolic See had been subjected, and the incalculable scandal that had been caused by their circulation. "We must take into account," says the sage and holy bishop, "that some people will be found to believe a thing as long as it is a *possibility* even; we remove all *scandalum infirmorum* by making such conduct on the part of clerics *impossible;* this is secured by having present at all times a companion or witness. Those whose revenues do not permit of their keeping a second priest in the house with them, sleeping in the same apartment at night, can arrange with others in the neighborhood similarly circumstanced, so that two may have their beds in the same or in adjoining rooms. Outside the females sanctioned by the canons, let no woman, especially one unconnected with the house, be admitted save on strict business, and, that over, let her at once depart, lest the reputation even of the most innocent should be compromised."

Again in the passage of the Apologia where the auditor notices, with biting sarcasm, the sneering reference of the opposite party to the class of people that flocked around the venerable Pontiff on his way to stand his trial, he conveys pretty clearly that the Pope's revilers had hinted at unworthy and disreputable motives engendering their sympathy. It is needless to say that the poor and destitute were the special beneficiaries, as they have always been, of the Supreme Pontiff's generosity and the most attached and devoted to his person. Hence when they saw their beloved Bishop and bene-

factor proceeding to the council, to be there charged by his malignant and crime-stained enemies with abominations of which they knew him to be perfectly innocent, it is no wonder that they gathered around him, with frantic manifestations of their grief and indignation.

But the matter is placed entirely outside the pale of doubt or conjecture by a document known as the Manuscript of Verona, discovered about 200 years ago and published in a Roman edition of the lives of certain Popes by a learned compiler named Mianchini. This production is undoubtedly authentic, in the less rigid sense of that word, its author's name being unknown. It was written about the time of the unfortunate schism we are dealing with, and is obviously the work of a strong partisan of the Antipope, as mendacious as it is scurrilous. Since it does not appear to have attracted the notice of most Catholic historians, some extracts from it may prove interesting. The bolder and more enlightened policy, approved by our present illustrious Pontiff, is never to shrink from publishing genuine historical facts and documents, with due distinction of the true and the false. Our Church has nothing to fear and everything to gain from an impartial investigation of all traditional and documentary evidence. "All the pick of the clergy and all the more worthy Senators supported Laurence, who was ordained according to the canons." This statement is an unexaggerated sample of the whole tone and tenor of the Verona Manuscript. In narrating the details of the pleading before the King in Ravenna on behalf of Symmachus it attributes, as we might expect, the royal decision to bribery, though it is utterly repugnant to the estimate all historians form and convey of that Prince's uprightness, to conceive him guilty of corruption. Had he been open to the acceptance of a bribe, Festus was both willing and able to offer him any amount he might name. Another charge is that of heterodox views on the Paschal question; but, as Ennodius deals with this insinuation so summarily, we assume it is only introduced to account for the alleged sojourn of Symmachus at Ravenna to test his orthodoxy. The story hangs so loosely together that its character of fiction is apparent in almost every sentence.

"Numerous crimes brought about, after some years, the impeachment of Symmachus before the King. There was special question of the Paschal Feast, which he celebrated at a different time from that observed by the great body of the faithful. The King summoned him to his presence to give some explanation of this diversity of practice, and obliged himself and the clergy in his immediate entourage to abide at Rimini for some time, with a view to testing their orthodoxy on this point. One evening, as Symmachus was

taking a walk on the seashore, he noticed certain women pass along that he was accused of being too familiar with. They were proceeding to the palace by the King's express orders. Without revealing to anybody that his fears were aroused by what he had remarked, he kept perfectly quiet all night, and then, protected by the darkness, he drove rapidly to Rome and concealed himself within the walls of his palace. The clergy who had been his companions protested to the King that they had neither cognizance nor suspicion of his intended flight. Then the King gave them a mandate to be conveyed to the Senate and the clergy, ordering them to take immediate steps to secure the Pontiff's condemnation and punishment."

Now, if this silly invention rested on the smallest basis of solid fact, is it conceivable that the King would have visited the culprit in state on the occasion of his triumphal entry into Rome and have maintained the most cordial relations with him for many years after? Is it likely that an Arian Prince would have given himself any worry about the differences in the Catholic Church in regard to the celebration of Easter? Would historians have formed a conspiracy of silence on the subject and have spared Symmachus alone, while they invariably exposed such practices no matter by whom else they were followed? But such trashy fictions were quite capable, in the circumstances, of misleading the crowd, who paused not to weigh the probabilities of the case and were absolutely at the mercy of unverified hearsay. Newspapers and telegraph wires were undreamt of; hence contradictions did not follow in hot haste, as they do now, on the heels of lying gossip.

"They accused him, in the second place, of having squandered recklessly the revenues of the Church, in direct contravention of canonical prohibitions, decreed by his predecessors. He had, therefore, incurred the censures attaching to such acts of expenditure. But what contributed most effectively to pull the mask off his pretended uprightness was the infamous Conditaria, as she was called in the city, and his open trafficking in holy orders for a fixed price in money. Thus it happened that up to the death of that Pontiff the Roman Church continued in a state of schism." This last assertion is directly contradicted by the statement occurring earlier in the document that "after four years Laurence, of his own motion, to prevent the recurrence of the horrid scenes of civil war, retired to a country residence of the patrician Festus, and passed the rest of his days in self-abnegation of the most exemplary order." That this retirement from the belligerent and tumultuous life he had been leading in the city was *not* resolved upon quite "of his own motion" is obvious from another passage of the same unreliable production:

"The King enjoined on the patrician Festus strict orders to restore all the churches to the regular government and dependence of Symmachus, and to tolerate only one Pontiff at Rome." This royal mandate was issued in 503, after the fourth council presided over by the lawful Pope, and its publication was a most crushing answer to the lying and filthy calumnies with which his enemies sought to sully his high reputation for sanctity and charity. Its issue and execution were too public to allow its existence and purport to be ignored even by the hostile writer of the precious document from which we have been quoting.

It is singular that, having just assured his readers that it was the hasty retreat of Pope Symmachus from Rimini on seeing his accomplices arrive at the palace to give evidence against him on the charge of scandalous conduct, that determined the King's action in having him publicly arraigned before a tribunal of his fellow-bishops, the same inconsistent author should allege that the Paschal irregularities were the chief count in the indictment. "In reference to the Paschal celebration all were unanimous in pressing the King to depute, as Visitor of the Roman Church, the venerable Peter, Bishop of Altinum, and when that solemn festival was over, by order of the King, who acceded to the request of the Senate and the clergy, a council was convened at Rome to inquire into the misdemeanors imputed to the Pope and to pronounce judgment thereon. Some bishops and Senators intrigued against the holding of such a council and proclaimed publicly that no tribunal could take cognizance of charges alleged against the Roman Pontiff, even though such charges were based on actual facts. But the cream of the episcopacy, considering the publicity the matter had attained, were of opinion that it was impossible to avoid a judicial inquiry, as well on the ground of religion as in obedience to the King. These differences produced animated discussions and added fuel to the flames of discord already raging; but at last it was decided that the impeachment should be entertained and officially investigated. Some prelates were despatched to summon Symmachus to appear, but they were repulsed by the clergy at the palace; a second and a third deputation were sent, but he did not condescend to reply. His friends made two strong appeals, at different stages, to the dissentients to return to his allegiance without further examination; but they replied that this course was impossible. Let him prove that he was innocent of the crimes alleged against him, and they would then acknowledge him; otherwise let him be deposed from the priesthood. These delays embittered the feelings of both parties, and the friends of Symmachus among the bishops retired to their respective sees. But all that was sound and uncorrupted in the Church and

Senate persevered in declining to communicate with that Pontiff and petitioned the King in favor of Laurence, whom they recalled from Ravenna, where he was then residing. They proved from the canons that having been elevated to the episcopacy at Rome, it is at Rome he should rule; and for four years he governed the Roman See. It is foreign to our purpose to recount in detail the dreadful havoc effected by these quarrels, which assumed the dimensions of a civil war; many citizens of every order were murdered during that prolonged and desperate conflict. At last Symmachus represented to the King, by despatching the Deacon Dioscorus of Alexandria to the court, the limitless extent of his losses, more particularly in regard to the leading parish churches of Rome, the revenues of which Laurence had appropriated. This recital of grievances deeply moved the King, and he ordered all the churches to resume their allegiance to the Pope."

It is unnecessary to dwell on the contradictions and errors with which this biased effusion everywhere teems. What we deduce from it as the main charges against the persecuted Symmachus were: First, some vague insinuations as to his being a Quartodeciman. This accusation did not assume definite shape, and is little attended to on either side. Most probably it was introduced merely to create a prejudice against him, as there was a furious craze at the time against all who were suspected of wrong views or practices on the Paschal question. Secondly, it was alleged that he had procured the King's decision in favor of the validity of his election by simoniacal means, and that, according to the laws regulating the elections of all bishops, bribery rendered his appointment null and void. This argument was privately addressed, with much show of virtuous indignation, to bishops and priests, and the accusation was circulated sedulously among the Senators and the people. Dread of the royal anger caused the Laurentian party to observe more caution in public. Besides, next to physical force, bribery was the most powerful weapon that party wielded, since the Emperor of the East had filled, and was prepared at any time to replenish, the coffers of the crafty Festus. Thirdly, the waste of the public funds of the Church was advanced as a crime entailing censure and deposition, but the allegation was regarded as a sort of grim joke, since it emanated from those who had sacrilegiously pillaged the treasures of all the leading basilicas, of which the Pope was no doubt the rightful guardian, and abused the plunder to compass the destruction of its first owner. Fourthly, he was accused of the lowest and most flagitious form of simony, practised in the open sale of holy orders and ecclesiastical preferments to the highest bidder. The particulars adduced to sustain this charge have not been transmitted; but the unsmirched

reputation accorded by most of his contemporaries and by all posterity to the illustrious and saintly victim of these gross calumnies leaves no room to doubt that this accusation was as groundless as the others. Lastly, the abominable fiction about his leading a sinful life and inviting a notorious courtesan, Conditaria, to his palace, throws a lurid light on the character of his accusers and must have intensified immensely the heartfelt sympathy of the vast majority of bishops, priests and people for their cruelly wronged Spiritual Father.

We cannot too urgently or too frequently direct the attention of the reader to the unyielding persistency of the great body of the bishops—here unconsciously attested as a public fact by this anti-papal scribe—with which they utterly disclaimed any jurisdiction to sit in judgment on the recognized Supreme Head of the Church. Ennodius, in his sublime oration, was but the faithful mouthpiece of the *ecclesia docens;* he voiced with eloquence and truth the sentiments of his contemporary successors of the Apostles, and echoed the pure doctrine of a more remote antiquity. Nor did the bishops themselves, individually and collectively, at home in their different sees or assembled together at Rome, fail for a moment to profess from the roof-tops the strong faith that was in them; quite as firmly, though not so eloquently as Ennodius, they all proclaimed that it was the Roman Pontiff alone that could summon them to a synod; that he enjoyed jurisdiction over them all by reason of the primacy of the Holy See. In evidence of this all-important fact, we read in every history dealing with the period that the bishops of Liguria, Emilia and Venitia, being obliged to pass through Ravenna on their journey to Rome, called at the palace and sought an audience with the King. Respectfully but vehemently they represented to him that the supremacy of the Holy See had been at all times recognized by the greatest councils that had ever assembled; that it was the privilege of the Pope alone to summon the prelates of the Church to meet in synod, and that no precedent existed for obliging the Roman Pontiff to submit himself to the judgment of his inferiors. The King replied with characteristic courteousness; Symmachus himself had expressly requested the summoning of the council; therefore, he was only carrying out the wishes of the Pope. Finally he permitted them to see for themselves the Pope's letter, in which he had begged the King to have the bishops convened with his authority and acquiescence. When they arrived in Rome Symmachus confirmed the accuracy of the King's explanation in every detail, and added that he was deeply grateful to that noble-minded Prince for having so promptly given effect to his wishes. He assured them they might proceed to attend the episcopal synod without any scru-

ples of conscience, as it was virtually by his command they were summoned. This incident possesses a deep and far-reaching significance; the all-wise Providence could not permit such an occurrence to pass unrecorded; it was a gleam of light revealing unbroken belief in an important dogma. But before proceeding to treat of this council in detail the order of events demands that we first give a brief account of the royal visit to Rome, where Theodoric made his first official entry in the September of 500.

With this we shall commence our next article.

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THE FIRST AND SECOND BOOKS OF COMMON PRAYER.

RELYING principally on Heylyn's and Canon Dixon's admissions, together with the significant fact that no mention is made in Wilkins' Concilia of any convocation of the bishops between December 26, 1547, and January 24, 1552, the learned authors of "Edward VI. and the Book of Common Prayer" have come to the conclusion that the Book itself never passed through Convocation.

Heylyn states in his "History of Edward VI." (p. 67) that the high Church or Catholic party, as they were then called, contended, at the time of its promulgation, "that neither the undertaking was advised nor the book itself approved in a synodical way by the bishops and clergy, but that it was only the act of some few of the prelates employed therein by the King or Lord Protector, without the knowledge and approbation of the rest."

Summoning to His Royal Presence, on September 1, 1549, the bishops and divines whom he had formerly employed for drawing up the "Form for administering Communion under both kinds in the English tongue," the King commanded them to frame a new public Liturgy, which should contain Morning and Evening prayer, together with a method "of administering the sacraments and sacramentals, and for celebrating all other public offices which were required for good Christian people; which, as His Majesty commanded, out of a most religious zeal for the honour of God, the edification of his subjects, and to the peace of his dominions; so they (who knew no better sacrifice than obedience) did cheerfully apply themselves to the undertaking." (Heylyn, 64.)

Taking the Latin Missals, Breviaries and ancient Liturgies as their groundwork, the bishops and divines deputed to compose the new Liturgy made what they considered judicious selections from the materials at their disposal by omitting the parts rejected by reformers as superstitious, whilst retaining other portions which, while unoffensive to the reformers, were likely to find favor with those who still adhered to the last remnants of the ancient faith. The great aim of the committee, according to Burnet (Vol. II., p. 73), "was to retain such things as the Primitive Church had practised, cutting off such abuses as the latter ages had grafted on to them, and to continue the use of other things which, though they had not been brought in so early, yet were of good use to beget devotion and were so recommended to the people by the practice of them that they, laying these aside, would perhaps have alienated them from the other changes." "The blessing of water, salt, bread, incense, candles, fire, bells, churches, images, altars, crosses, vessels, vestments, palms and flowers was in future to be omitted as superstitions."

The Committee decided that in future divine service should be conducted in the English tongue. The strongest reason urged for this change was the teaching of St. Paul (I. Cor. xiv.) who was said to have condemned the use of unknown tongues in the Church. It will, however, be evident to every unprejudiced and intelligent reader of the context that the Apostle meant only to condemn the conduct of certain disciples, who, possessing the gift of tongues, persisted, through vanity, in preaching in a language unknown to their congregations. (See I. Cor. xiv., 2, 6, 9, 23, 28.) St. Paul's condemnation, it is needless to add, has no reference to the use of the Latin language in the divine service. Even in public exhortations he professes himself willing to allow preaching in an unknown tongue if an interpreter be present (v. 28). But the language of the Catholic Liturgy has been translated into vernacular, and this translation is found in books of devotion side by side with the ancient Latin. It is evident from this that the argument based on the words of St. Paul is entirely irrelevant.

Nothing was said by the Committee, when discussing the Sacraments, concerning penance or the necessity of auricular confession. The reason of this reticence was that the Council by proclamation had lifted both questions beyond the region of disputation. It may perhaps here be interesting to mention an historical dispute which took place between Collier and Burnet, two Church historians representing respectively the views of the High and Low Church Schools of thought in the Church of England, concerning the doctrine of Sacramental Confession. Burnet advanced certain propositions unfavorable to the Sacrament, one being "that confession to a priest

is nowhere enjoined in the Sacred Scriptures" and another "that in the Primitive Church there was no obligation of confesssing secret sin, since all the Canons referred to public scandal," and thus confession had ceased with the abolition of public penance.

Collier, a high Church historian, replies (Vol. V., p. 258) that St. James (v. 16) lays down the necessity of confessing "one to another" and that this exhortation refers to verse 14, where the sick person is directed to call in the elders of the Church, that they might pray over him, "anointing him with oil." A parallel illustration which is given in explanation of the text is taken from I. Peter v., 5, where the Apostle commands us to be "subject one to another." To take these words literally would be to destroy all government and distinction in the Church, and what is worse, would end in contradiction, for it makes every one both subject and superior with respect to the same person and at the same time. But God "is not the author of dissension" (I. Cor. xiv., 33). To be "subject," therefore, "one to another" can only mean that persons who are placed in a subordinate position should not affect a leveling tendency, but submit to authority. By a parity of reasoning the text in St. James of "confessing one to another" must be understood of the sick man confessing his sins to the elders or priests of the Church.

The power of "binding and loosing" (Matthew xviii., 18), which Burnet mentioned as "simply declarative," Collier defends as follows: If, by declarative, Burnet means that priests have no such power in their commission to absolve the penitent, and that the absolution, if pronounced by a layman, would have the same signification—if this be his meaning, what construction can be placed on our Saviour's words to the Apostles:

"Receive ye the Holy Ghost.

"Whosoever sins ye remit, they are remitted unto them, and whosoever sins ye retain they are retained" (John xx., 23).

And can we imagine that words so plain in the expression and so solemn on the occasion are so void of weight and signification? They must amount to this at least; that those who neglect this ordinance of God and refuse to apply for absolution to persons thus authorized shall not have their sins forgiven them, though otherwise not unqualified.

Public penances were often inflicted in the early Church for sins secretly confessed, but there was nothing, when scandal would arise, in the penances given to indicate the nature of the sin committed. Collier proves this by quoting Saint Basil: "*Adulterio pollutas mulieres, et confitentes ob pietatem publicare quidem patres nostri prohibuerunt, eas autem stare sine communione, jusserunt, donec impleatur tempus penitentiæ.*" These escaped the discipline of the *flentes, audi-*

entes and *substrati*, and were immediately ranged with the Consistentes to prevent the discovery of their sin. From Sozomen we gather (Lib. 7, Cap. 16) that "it was customary to appoint, as penitentiary, some priest eminent for his prudence and regular behavior, but especially one who was remarkable for his secrecy." Now, as Collier asks Burnet, why should this latter qualification be thought so necessary in a penitentiary if confessional secrecy were not considered necessary?

The confession of a scandalous sin made publicly by a lady in the presence of a whole congregation induced Nectarius, Patriarch of Constantinople, to issue an order for the discontinuance of public penance within his province, A. D. 390. This seems to have been the signal for the general abolition of public penitential discipline throughout the whole Church, although when it passed away auricular confession, which always existed before it and will ever exist, still remained.

With the abolition of public penances the office of the public penitentiary lapsed and the faithful were left free to select their own Confessors. To prevent, however, any undue harshness on the part of Confessors towards their penitents, books calculated to limit private penances according to the number and degrees of sin were composed for the priests' instruction and guidance.

These penance books were common amongst the Irish and British Catholics in the fifth century, according to Alzog (Church Hist., Vol. I., p. 513) and in the kingdom of the Franks at the time of Saint Columbanus (A. D. 615).

Returning again to the bishops and divines assembled in committee at Windsor, as a result of their inquiry into the teaching of the Primitive Church they decided, in deference to the authority of Tertullian (A. D. 220) to retain the sign of the Cross. The words of that great writer are certainly very convincing.

"At every step and movement, at every going in and out, when we put on our clothes and shoes, when we bathe, when we sit at table, when we light the lamps, on couch, on seat, in all ordinary actions of daily life we trace upon our foreheads the sign [of the Cross]. If for these and other such rules you insist upon having positive Scripture injunction you will find none. Tradition will be set forth as the originator, custom as the strengthener and faith as the observer." (De Corona, Vol. I., p. 336).* Liturgy requiring that the priest "should make a cross upon the child's forehead and breast at baptism, say," etc., etc.

* We have employed and when quoting the early writers shall employ throughout our article the translation published by J. & J. Clark, Edinburgh, in the Ante-Nicene Library, 1870.

The ancient ceremony of exorcising the devil was also to be continued, and it was countenanced by the authority of Saint Augustine, after which, to quote the rubric, "The priest shall take the child in his hands . . . and shall dip it in the water thrice, first dipping the right side, second the left side and the third time dipping the face towards the font." Afterwards the child should be anointed with chrism.

Tertullian, St. Cyprian and the *Apostolic Constitutions* supplied the warrant for the ceremony of anointing the baptized. Tertullian's words are these: "When we have issued from the font we are thoroughly anointed (a practice derived) from the old discipline, wherein on entering the priesthood (men) were wont to be anointed with oil from a horn. . . . Thus in our case the unction runs (down the flesh) carnally, but profits spiritually in the same way as the act of baptism itself too is carnal, in which we are plunged in water, the effect spiritual in that we are freed from sins." (De Baptismo, Cap. 7.)

St. Cyprian, martyred 258, holds the same doctrine. "It is necessary," he states, "that he should be anointed who is baptized, so that having received the Chrism, that is the anointing, he may be anointed of God, and have in him the grace of Christ." (Epistle 69.) In the *Apostolic Constitutions* the following instructions are given to bishops: "Then, therefore, O bishop, according to that type shall you anoint the head of those that are to be baptized, whether they be men or women, with the holy oil of spiritual baptism. After that either thou, O bishop, or a presbyter that is under thee, shall in the solemn form name over them the Father, the Son and the Holy Ghost, and shall dip them in water, and let the deacon receive the man, and the deaconess the woman, that so the conferring of this inviolable seal may take place with becoming decency. And after that let the bishop anoint those with ointment." (Lib. 3, p. 105.)

The anointing at Confirmation, which in the first ages of the Church followed closely after baptism, is also a primitive custom, and as such was sanctioned by the committee.

The form sanctioned in the New Liturgy for conferring this sacrament was: "Sign them, O Lord, and mark them to be thine forever by the virtue of Thy Holy Cross and Passion; confirm and strengthen them with the inward unction of Thy Holy Ghost. Amen."

"And since the soul, in consequence of its salvation, is chosen to the service of God," says Tertullian, "it is the flesh that renders it actually capable of such service. The flesh indeed is washed in order that the soul may be cleansed; the flesh is anointed that the soul may be con-

secrated; the flesh is signed [with the sign of the Cross] that the soul may be fortified; the flesh is shadowed with the imposition of hands that the soul may be illuminated by the Spirit; the flesh feeds on the Body and Blood of Christ that the soul may fatten on God." (De Resurrectione Carnis, Vol. II., Cap. 8, p. 229.)

At marriage the ring and gold and silver tokens were to be given and the priest was instructed to bless them with the sign of the Cross.

With regard to the sacrament of extreme unction, it was ordered that if the sick person wished to be anointed the priest "should anoint him upon the forehead and breast only, making the sign of the Cross, saying the words, 'As with the visible oil thy body outwardly is anointed,' etc., etc."

Anointing the sick with oil is a Scriptural custom. St. Mark (vi., 13) states that the Apostles "anointed with oil many that were sick and healed them." The instructions of St. James (v., 14, 15) are clearer still:

V. 14. "Is any sick amongst you? Let him call for the elders of the Church, and let them pray over him, anointing him with oil in the name of the Lord."

V. 15. "And the prayer of faith shall save the sick, and the Lord shall raise him up, and if he have committed sins they shall be forgiven him."

Prayers and oblations for the dead, as evidently of ancient usage, were also included in the First Common Prayer Book. The words of Tertullian and St. Cyprian were too clear to allow of tergiversation on this matter. "As often as the anniversary comes round, we make offerings for the dead as birthday honors" are the words of Tertullian (De Corona, p. 336). The same writer represents a widow as "praying for the soul of her deceased husband, and requesting refreshment [for him] in the first resurrection, and she offers [her sacrifice] on the anniversary of his falling to sleep." (De Monogamia, Vol. III., Cap. 10, p. 41.)

St. Cyprian, more explicit still, asks his brethren to "take note of the days on which 'the faithful' depart, that we may celebrate their commemoration amongst the memorials of the martyrs, although Tertullus, our faithful and devoted brother, who, in addition to the solicitude and care which he shows to the brethren in all service of labor, is not wanting in that respect in any care of their bodies, has written and does write and intimate to me the days on which our beloved brethren in prison pass by the gate of a glorious death to their immortality; and these are celebrated by oblations and sacrifices for their commemorations; which things, with the Lord's protection, we shall celebrate with you." (Epist. 36, Sect. 2.)

In his letter to Cornelius St. Cyprian makes this beautiful ex-

hortation: "Let us remember one another in concord and unanimity. Let us, on both sides, always pray for one another. Let us relieve burdens and afflictions by mutual love, that if any one of us by the swiftness of divine condescension shall go hence the first, our love may continue in the presence of the Lord and our prayers for our brethren and sisters not cease in the presence of the Father's mercy. I bid you, dearest brother, ever heartily, farewell." (Epist, 36, Sect. 5.)

Collier takes care to observe "that though the Church of England dislikes the Romish doctrine of Purgatory, we cannot from this infer her dislike of prayers for the dead" (Vol. V., p. 292).

Now what this excellent historian calls the "Romish doctrine of Purgatory" seems marvelously to agree with the teaching of Origen. (b. A. D. 185, d. 254.) These are his words: "For this cause, therefore, he that is saved is saved by fire, that if he happens to have anything in the nature of lead commingled with him, that fire may burn and melt it away that all men may become pure gold, because the gold of the land, which the saints possess, is said to be pure; and as the furnace trieth gold, so doth temptation try the just. (Eccl. ii., 5.) All therefore must come to the fire; all must come to the furnace, for the Lord sits and He shall purify the sons of Judah. But, also, when we shall have come to this place, if one shall have brought many good works and some little iniquity, that little is melted away and purifies in the fire like lead, and all remains pure gold." (Hom. 6 in Exod. Compare I. Cor. iii., 12 to 15.)

The same author declares that heaven is the final reward of Christians who "after their apprehension and their chastisements for their offenses, which they have undergone by way of purgation, may, after having fulfilled and discharged every obligation, deserve a habitation in that land, whilst those who have been obedient to the Word of God and have henceforth by their obedience shown themselves capable of wisdom, deserve that kingdom of heaven or heavens, and thus the prediction is more worthily fulfilled, 'Blessed are the meek, for they shall possess the land.' (De Principiis, Vol I., p. 90.)"

In the Communion Service in the First Liturgy that part which immediately precedes the words of consecration presupposed a sacrificial oblation. The rubric, however, which forbade any elevation or adoration of the sacred elements after consecration bears witness to the Calvinistic bias of some of the members of the committee.

Now it is easy to gather the doctrine of Eucharistic sacrifice from the writings of Justin Martyr, who died A. D. 166. In his famous dialogue with Trypho, a learned Jew, he clearly proves the Eucharistic sacrifice from the Prophet Malachi i., 11: "The offering of fine flour which was prescribed to be presented on behalf of those

purified from leprosy was a type of the bread of the Eucharist, the celebration of which our Lord Jesus Christ prescribed in remembrance of the suffering He endured on behalf of those who are purified from all iniquity, in order that we may at the same time thank God for having created the world with all things therein, for the sake of man and for delivering us from evil in which we were, and for utterly overthrowing the principalities and powers, by Him who suffered according to His will. Hence God speaks by the mouth of Malachi, one of the twelve [prophets], as I said before, about the sacrifices of that time presented by you. 'I have no pleasure in you, saith the Lord, and I will not accept your sacrifices at your hands, for from the rising of the sun unto the going down of the same, My name hath been glorified among the Gentiles, and in every place incense is offered to My name and a pure offering, for My name is great among the Gentiles, saith the Lord, but ye profane it.' He then speaks of those Gentiles, namely, us, who in every place offer sacrifices to Him, *i. e.*, the bread of the Eucharist and also the cup of the Eucharist, affirming both that we glorify His name and that you profane it." (Dialogue with Trypho, Chap. 41.)

Listen to St. Cyprian on the Christian Priesthood and sacrifice: "Who is more a priest of the most High God than our Lord Jesus Christ, who offered Himself a sacrifice to God the Father, and offered the very same thing that Melchisideck had offered, that is, bread and wine, to wit, His body and blood," (Epistle 62, Sec. 4). Again he continues: "If Jesus Christ, our Lord and God is Himself a priest of God the Father and has offered Himself a sacrifice to the Father and has commanded this to be done in commemoration of Himself, certainly that priest truly discharges the office of Christ who imitates that which Christ did, and he offers a true and full sacrifice in the Church to God the Father when he proceeds to offer it according to what he sees Christ to have offered." (Epistle 62, Sec. 14.)

Describing a scene which occurred whilst he himself was saying Mass, St. Cyprian writes: "A woman, who in advanced life and of more mature age, secretly crept in among us when we were sacrificing, received not food but a sword for herself, and as if taking some deadly poison into her jaws and body, began presently to be tortured and to become stiffened with frenzy and suffering the misery, no longer of persecution, but of her crime, shivering and trembling she fell down. The crime of her dissimulated conscience was not long unpunished or concealed." (De Lapsis, Sect. 26, p. 369.)

The prayer before consecration in the First Common Prayer Book was as follows: "O God, heavenly Father, who of Thy tender mercy didst give Thine only Son Jesus Christ to suffer death upon

the Cross for our Redemption, who made these (by His one oblation once offered) a full, perfect and sufficient sacrifice, oblation and satisfaction for the sins of the whole world, and did institute, and in His holy Gospel, command us to celebrate a perpetual memory of His precious death until His coming again, hear us (O merciful Father), we beseech Thee, and with Thy Holy Spirit and word vouchsafe to bless and sanctify these Thy gifts and creatures of bread and wine, that they may be unto us the body and blood of Thy most dearly beloved Son, Jesus Christ, who in the same night that He was betrayed took bread, and when He had blessed and given thanks, He brake it and gave it to His disciples, saying, 'Take, eat, this is My Body which is given for you; do this in remembrance of Me.' Likewise after supper He took the cup and when He had given thanks, He gave it to them, saying, 'Drink ye all of this, for this is My Blood of the New Testament which is shed for you, and for many, for remission of sins. Do this as often as you shall drink it in remembrance of Me.' "

The rubric added was: "These words before rehearsed are to be said turning still to the altar without any elevation or showing the sacrament to the people." This rubric, more than any other reason, caused the bishops of Catholic tendencies to vote against the New Liturgy when it was presented at the House of Lords.

The Eucharist sacrifice is called in the First Common Prayer Book "The Supper of the Lord and the Holy Communion, commonly called the Mass." The rubric directs that "at the time appointed for the ministration of the Holy Communion, the priest that shall execute the holy ministry shall put upon him the vesture appointed for that ministration, that is to say, a white albe, plain, with a vestment or cope. And where there be many priests or deacons, so many shall be ready to help the priest in the ministration as shall be requisite, and shall have upon them likewise the vestures appointed for their ministry, that is to say, albes and tunicles."

Presented to Parliament for the third reading on January 15, 1549, the New Liturgy received the sanction of the House of Lords and the approval of the King and Council. Thirteen bishops voted in its favor and eleven against it. If some of the absentee bishops, whose Catholic views were notorious, had been present to record their votes on the occasion the minority would be converted into a majority.

Received by the Lutherans as a mere instalment of the Reformation, condemned by Calvinists as strongly savoring of the "ancient superstition," and accepted with sullen acquiescence by all who still cherished the ancient faith, the First Book of Common Prayer was, from its infancy, doomed to die. The Catholic party viewed it with

particular distrust because, as has already been remarked, the elevation and adoration of the Blessed Sacrament after consecration were forbidden by the rubric, whilst at the same time the doctrine of the Real Presence was neither affirmed nor denied, but skilfully avoided.

It would appear that many bishops and priests, while carrying out the New Liturgy in public to escape the penalties attaching to its non-observance, continued in private to celebrate Mass according to the ancient rite. Bonner, Bishop of London, and the clergy of St. Paul's seem to have incurred the displeasure of the Council by this offense, as the letter of censure addressed to the bishop on June 24, 1549, clearly indicates.

Soon after the complete suppression of the insurrections provoked by the forcible promulgation of the New Liturgy the Council succeeded in inducing Parliament to pass an act in November, 1549, "for taking down such images as were still remaining in the churches, also for calling in all antiphonaries, missals, breviaries, offices, horaries, primers and processionals with other books of false and superstitious worship."

The passing of this act was announced by Royal Proclamation, and Cranmer, in a circular letter to all the suffragan bishops, commanded them to enforce it in all their dioceses. Whilst the Archbishop of Canterbury's imported divines, Peter Martyr at Oxford and Martin Bucer at Cambridge, were openly denouncing the doctrine of the Real Presence, Calvin, who, to use Collier's words, "thought himself wiser than all the Fathers of the Primitive Church," commenced a fierce onslaught on the First Common Prayer Book. Heylyn's estimate of Calvin's vanity is just as contemptuous as Collier's. "Thinking nothing well done except what was either done by him or by his direction, . . . Calvin must needs be meddling in such matters as belonged not to him." (Heylyn, p. 80.)

In his letters to the Lord Protector, the archreformer condemned the ancient custom of anointing at Baptism, Confirmation and Extreme Unction, whilst he held up his hands in horror at prayers for the dead.

Calvin found an unexpected ally in his attempts to reform the First Common Prayer Book in the person of Hooper, the Bishop-elect of Gloucester, who asked to be excused from wearing episcopal vestments during the coming consecration service. Supported by Ridley, now Bishop of London, Cranmer humbly craved not to obey the King, who, influenced by Warwick, wished to accede to Hooper's request, and was so successful in his opposition that Hooper, who continued obstinate, was committed to the Tower. Still bent on fomenting dissension from his prison, the bishop-elect

addressed letters to Martin Bucer and Peter Martyr requesting their opinions on the merits of his case. Calvin now came forward with the suggestion that Hooper should be required to wear episcopal vestments during his consecration service, but dispensed from wearing them afterwards, and this suggestion was gratefully accepted by both parties.

This discussion gave rise to an agitation amongst the reforming clergy throughout England against the use of episcopal and priestly vestments, and finally led to their abolition.

The altars were not destined to long survive the priestly robes. Hooper, when preaching in the royal presence in the year 1550, maintained that the only remedy for the religious anarchy then prevalent was the substitution of tables for altars, so that the people might be effectually dissuaded from believing in the Eucharistic sacrifice.

This sermon was received by all the courtiers present with warm approval, not that they cared much for the theological aspect of the question, but for a more lucrative reason, "they promised themselves no small hope of profit by the disfranchising of altars, hangings, palls, plate and other rich utensils which every parish had more or less provided for them, and that this consideration might prevail upon them as much as any other, if perhaps not more, may be collected from an inquiry made about two years after, in which it was asked what jewels, crosses, candlesticks, censers, chalices, copes and other vestments were then remaining in any of the Cathedral or parochial churches or otherwise had been embezzled or taken away, leaving only one chalice to every church, with a cloth for the communion table being thought sufficient." (Heylyn, p. 95.)

The influence of the Calvinistic party in England hastened the current of events which tended to leave the Anglican Churches in "all the nakedness and simplicity" of their own conventicles. Without the sanction of either Convocation or Parliament, a letter dated November 24, 1550, bearing the royal seal and subscribed by Somerset and the rest of the Council, was addressed to Ridley commanding him to substitute tables for altars in all the churches and chapels of his diocese. The Bishop of London rigorously carried out the orders of Council in his own diocese, but Heylyn (p. 97) states that "no universal change of altars into table took place until the first New Liturgy was repealed."

In the meantime all those bishops who were opposed to further reformation were either deprived of their sees, heavily fined, or coerced into helpless submission. Gardiner, of Winchester; Bonner, of London; Tunstal, of Durham; Day, of Chichester; Heath, of Worcester, and Voysey, of Exeter, were deprived of their sees.

Kitchen, of Llandaff; Salcot, of Salisbury, and Sampson, of Lichfield, submitted with such evident reluctance that most of their diocesan estates were confiscated by the Crown. Thirlby, of Westminster; Skyp, of Hereford; Aldrich, of Carlisle; King, of Oxford; Parfue, of St. Asaphs, and Gooderich, of Ely, notwithstanding their well-known Catholic sympathies, were helplessly carried on by the tide of the reformation. Rugg, of Norwich, resigned his see to save his conscience.

Any one who closely reads the discussions which took place at Windsor before the form for administering Holy Communion under both kinds was finally settled by the committee of divines will come to the conclusion that only four bishops, viz., Cranmer, Ridley, Ferrars and Holbeach, heartily accepted the latest doctrines of the Reformation in the beginning of this reign. But these four bishops, backed up as they were by the powerful influence of the "Pirates of the Council," as Heylyn calls them, easily put their opponents to the rout.

The ranks of the Lutheran and Calvinistic bishops in the Church of England were materially strengthened by the prelates appointed to the sees left vacant by the deprivation or retirement of the bishops of Catholic tendencies who had the courage of their opinions. Ridley succeeded Bonner (deprived) in the See of London; Poynet first succeeded Ridley as Bishop of Rochester and was afterwards appointed to the See of Winchester in place of Gardiner (deprived). Miles Coverdale succeeded Voysey, Bishop of Exeter (deprived). Hooper was appointed to the See of Gloucester, left vacant by the death of Wakeham. Scory succeeded Day, of Chichester (deprived). No one was appointed to succeed Heath, of Worcester (deprived). Westminster was left vacant after the subservient Thirlby's promotion, and Tunstal, Bishop of Durham, was kept in prison until the dissolution of his bishopric by act of Parliament.

Ferrars, of St. Davids, was the first bishop consecrated according to the form of the New Ordinal, and his consecration took place, according to Heylyn, before the New Ordinal had received the sanction of Parliament. Miles Coverdale, consecrated on August 13, 1551, and Scory, elevated to the episcopate two days afterwards, were the next in succession according to the same authority. (Edward VI., p. 98.)

The revision of the First Common Prayer Book occupied the entire year of 1551.

With unwearying persistency Calvin had been employing all his great influence since the First Liturgy had received the sanction of Parliament in 1549, with the view to securing its revision and the introduction in its stead of a Liturgy more in harmony with his own

doctrines. He had written numerous letters to the Protector, the King, the Council and the Archbishop of Canterbury on the subject; as he himself states in a letter to Bullinger written on the 29th of August, he urged them to proceed to such a reformation as he himself had projected. Nothing short of this, he declared, would satisfy his followers. In his letters to the King he insisted that many things were still amiss in the State of the Kingdom and stood in grave need of reformation; while in letters to Cranmer he laments that in the service of the Church, as then it stood, there remained a whole mass of Popery which did not only darken, but even destroy God's holy worship. But, "fearing that he might not prevail with so wise a Prince, assisted by such a prudent Council and such learned prelates, he hath his agents in the Court, the country and the universities, by whom he drives on his design at all parts at once." (Heylyn, p. 107.)

Collier fastens the whole blame for altering the First Liturgy on Calvin, Bucer and Peter Martyr, in other words, on three foreigners. "Calvin, who thought himself wiser than the ancient Church and fit to dictate religion to all countries in Christendom, has taken some pains in this matter. In one of his letters to Cranmer he speaks disgracefully of the English Reformation; that there was so much Popery and intolerable stuff in it still remaining that the pure worship of God was not only weakened, but in a manner stifled and overlaid with it."

"Bucer was a strong second to Calvin, and Peter Martyr agreed with Bucer's amendments, as appears by his letter, in which there are some remarkable passages. He gives God thanks for making himself and Bucer instrumental in putting the bishops in mind of the exceptionable places in the Common Prayer Book. He declares that the Archbishop Cranmer told him that they had met for this purpose and resolved on a great many alterations, but what their corrections were Cranmer did not explain. He adds that Sir John Cheek (the King's tutor) told him that if the bishops refused to consent to altering what was necessary, the King was resolved to do it himself and recommend his revision to the next session of Parliament." (Vol. V., p. 433.)

The meeting of the bishops mentioned by Cranmer took place in 1550. As all the lately elected bishops were ultra reformers and as the old "Catholic bishops" who attended were cowed into docile submission by the punishment already inflicted on their brethren, no difficulty was experienced by Cranmer in persuading the bishops to agree to a revision of the First Common Prayer Book and to depute a committee of bishops and learned men for that purpose.

When at length Parliament, in 1552, sanctioned the revision of

the First Liturgy, with singular inconsistency it passed a grand eulogium on its perfection before according it a reverential burial. The act states firstly "that there was nothing in the book but what was agreeable to the Word of God and the Primitive Church, and very comfortable to all good people desiring to live in Christian conversation and most profitable to the estate of this realm. Secondly, that such doubts which had been raised in the use and exercise thereof proceeded rather from the curiosity of the Minister and mistakers than from any worthy cause, and therefore, thirdly, that the said book should be faithfully perused, explained and made fully perfect in all such places in which it was necessary to be made earnest and fit for stirring up all Christian people to the true honoring of Almighty God." (Act 5, Ed. VI., cap. 1.)

All who still cherished the last remnants of the Ante-Nicene Church must have been shocked at finding that the Second Common Prayer Book did not sanction the sign of the Cross, the ceremonies of anointing at Baptism and Confirmation nor prayers and oblations for the dead. Many, too, were horrified on finding it explained that although kneeling was prescribed by the rubric in receiving Holy Communion, "no adoration was intended or ought to be done either to the sacramental bread and wine there bodily received or unto any corporal presence of Christ's natural flesh and blood. For the sacramental bread and wine remain still in their own natural substances and therefore may not be adored, for that were idolatry to be abhorred by all faithful Christians." (Collier v., 434.) Thus, for the first time, the Church of England openly denied the Real Presence of Christ in the Blessed Sacrament and in the Sacrifice of the Mass, which supposes that penance, prayers and oblations for the dead found no place in the revised Liturgy.

St. Justin Martyr, Origen, Tertullian, St. Cyprian, who with the "*Apostolic Constitutions*" had been quoted as witnesses to the doctrines and practices of the Ante-Nicene Church as set forth in the First Common Prayer Book, were now scornfully set aside; even the authority of Saint Mark (vi., 13) and St. James (v., 14, 15) could not preserve the Sacrament of Extreme Unction from the condemnation of Calvin's disciples.

Many respected members of the Church of England at the present day are of opinion that the Second Book of Common Prayer ought to be interpreted by the First, which bears the "imprimatur" of Parliament. The reasons assigned for the revision of the First Liturgy, viz., "the desire to meet the wishes of mistakers," who, to quote Collier's words, "had more scruples than understanding," furnishes, they affirm, no ground for the abolition of the First Common Prayer Book. It follows, then, that when the Second Book of Common

Prayer was first promulgated it still remained lawful to accept the doctrines and practise the ceremonies authorized in the First Book. It remained still lawful to sign oneself with the sign of the Cross, privately at least to pray for the souls departed, and they could still call in the priests of the Church to administer Extreme Unction, for this sacrament, though omitted from the Second Liturgy, was, they contend, not condemned by it. The connection which exists between the First Book of Common Prayer and the one in use at present is practically the same as that which existed between the First and Second Liturgy during King Edward's reign. High Churchmen, therefore, cannot fairly be called dishonest when they claim the right to make the sign of the Cross, to use the ceremonies of anointing at Baptism, Confirmation and Extreme Unction and to pray for the dead, as these ceremonies and rites were pronounced by Parliament in the sanction which it gave to the First Liturgy to be in accordance with Scripture and early tradition, whilst they are only omitted but not condemned in the Second.

For a similar reason Anglicans are justified in holding the doctrines of the Real Presence and of the Eucharistic Sacrifice, since these doctrines find their warrant in the First Book of Common Prayer.

But if the truth of the contention of the High Church party were, however, granted, the members of that party would still have to face the difficulty of belonging to a Church the majority of whose followers in the present day differ from them in faith. What may be the truth of this contention is not for us to decide, nor is it our business to discover how High Churchmen can reconcile it with their conscience to belong to a Church most of whose members deny every one of those doctrines to which High Churchmen so rigidly adhere. Bishops like Gardiner, Bonner, Day, Tunstal, Heath and Voysey submitted cheerfully to imprisonment and deprivation rather than accept the attenuated form of "Catholicity" which finally found expression in the Second Book of Common Prayer, with the Ordinal and Articles attached.

Kitchen, of Llandaff; Salcot, of Salisbury, and Sampson, of Lichfield, suffered most of their diocesan estates to be confiscated before reluctantly submitting to the latest reforms.

Anglican clergymen should ever remember the words of Bonner before his condemnation by the Commission at Lambeth for preaching Catholic doctrine at St. Paul's Cross: "I have a right to three things," said he, "a few effects, a poor carcass and my soul. The first two you may make a prize of, but I will keep the last out of your power."

William Fleming.

London, England.

DIVINE ELEMENT IN SCRIPTURE—REVELATION.

IN Holy Scripture we have a Book that has solved more of the problems of life, that has awakened more lofty sentiments, that has aroused more genuine religious enthusiasm, that has prompted to more heroic deeds, that has inspired more useful lives, and that has helped to make men more gentle and manly, more truthful and honest, both as citizens and as Christians, than any other book ever written. In fact, it has exercised such a stupendous influence on the civilized world that we may rightly infer that there must be some strange power lodged within its pages; and the question naturally suggests itself, What is the secret of this power? How is this singular, this widespread, this permanent influence of the Book to be accounted for? What is it that gives to Holy Writ so firm a hold on the best and the noblest of our race? It is because Scripture is a *Divine* Book.

In all ages of the Christian Church the Bible has been, in some way, considered Divine and has been called "The Divine Word," "The Divine Book," "The Divine Oracles," "Divine Writ," "The Divine Library of Holy Scripture." But in what sense or, rather, in how many senses is Scripture Divine? And wherein consists its Divinity? To avoid confusion in the use of the term it may be well to make a clear distinction between two senses of the word when applied to the good Book, for Scripture is Divine in two ways: (1) By reason of its *Contents*, and (2) By reason of its *Author*.

Holy Scripture is Divine on account of its contents, on account of the topics handled in it, on account of the subject matter treated in it, on account of the truths taught in it—all of which are Divine, in so far as they treat of God and "the deep things of God." Understood in this sense, as indicating the character of the contents, Divinity is not peculiar to Scripture alone, but is common to many other books, such as the "Divina Commedia" of Dante, as well as the works of many theological writers.

In the same sense many traditions of the Church are called "Divine," to distinguish them from such as are merely ecclesiastical, Apostolic or even human in character. In the same sense, that is, for teaching so many of "the deep things of God," St. John has been called the "Divine," "O Theologos." In the same sense a student of theology is often called a student of Divinity. Therefore, if the topics discussed in a book refer directly to God, the book, whether it is inspired or not, may be properly called, and is, Divine.

Again, Holy Scripture is called Divine on account of its origin,

on account of the Divine Source from whence it proceeded, on account of the Divine Cause by which it was produced, on account of the Divine Author by whom it was composed. In this, case, whatever may be the character of the contents of the book, whether Divine or not, the *book* is Divine, because it was composed by a Divine Person and "has God for its Author." The book, considered merely as a written document, that is *qua scriptus*, is the result of a supernatural operation of God exercised on the human writer, both urging him to write and assisting him while in the act of writing, in such a way that God becomes the primary Author of the book so written and man the secondary author. In this case the book is Divine, because the act of composing it is a Divine act and was performed by God, through the instrumentality of man.

Thus the Divinity of Scripture includes two ideas, (1) Divine Topics, Contents or Truths, and (2) Divine Authorship or Composition. In other and fewer words, there are in Scripture two distinct Divine elements, the one called *Revelation* and the other *Inspiration.*

There seems not to be any other way to make clear to the reader the distinction between these two words Revelation and Inspiration than to define each absolutely, and then to consider them relatively to each other, comparing or contrasting the one with the other, to see wherein they agree and wherein they differ. But to do this will take both time and space. Therefore, reserving the question of Inspiration for future consideration, we shall, in the present article, speak only of

I. REVELATION.

The word Revelation is somewhat ambiguous and needs defining. It is one of the many figurative words borrowed from the Latin for the purpose of enriching our language. It is used in a great variety of senses. Literally and in its broadest signification, it denotes the removal of a veil, in order that what lies behind it may be seen. It is the putting aside of a veil, in order that what was before concealed may be discovered. It is the act of disclosing to view something previously hidden. The word is sometimes extended to the disclosure of a material object or of some concrete thing, event, institution or person; and it is sometimes limited to utterances that embody a truth, whether theoretical or practical. It is taken in an *Active* sense when it denotes the act itself of manifesting truth; it is taken in a *Passive* sense when it denotes the result of such act, the truth or collection of truths so revealed, the knowledge thus obtained.

Revelation may be either *Human* or *Divine.* Revelation is human when it is man who reveals. In this sense the present article may be a revelation to such of its readers as may not be familiar with

the subject matter. But of human revelation nothing more need be said. Revelation is Divine when it is God who reveals. Divine Revelation, taken in its broadest sense, includes every manifestation of God to man, no matter whether made through conscience or through the constitution of the human mind, as is sometimes assumed, or through the harmony prevailing in the universe, or through the process of the divine government of the world, or through the framework of physical nature. It embraces the entire compass of Divine disclosure, whether in word or in work, whether in the direct contact of the spirit of God on the spirit of man, whether of truth in general or of some special concrete fact, or disposition of the Divine Will in an individual case.

Every Divine Revelation implies a Subject, an Object and a Recipient, that is, a subject or agent revealing, an object, person, thing or truth revealed, and a person to whom the revelation is made. Now the *Subject* or Revealer is God; for, in the last analysis, God must be the only ultimate source of knowledge about Himself, His existence, His attributes and His relations to His creatures. The *Object* or Person revealed is also God. The Revealer reveals Himself before all else, and thus the Subject and the Object blend into one. In Scripture every providential act of God manifests either His Power, or His Wisdom, or His Justice, or His Mercy, or His Truthfulness, or His Grace, or His Holiness; or shows Him to be a God to be feared, to be obeyed, to be trusted, to be loved. The one object, then, that underlies all Divine revelation is not so much a speculative truth as it is God Himself, the concrete being of the One, Holy, Living God, in His infinite nature and divine attributes.

The *Recipient* of the Revelation is man. Every revelation necessarily presupposes reason, a faculty capable of apprehending, if not of comprehending, the terms in which the revelation is expressed. It is evidently in the nature of things that no revelation can be made to a stone or a stump, to a dumb beast or even to an idiot. Intelligence of some kind is essential to revelation of any kind, and a higher order of intelligence is a prerequisite to a higher order of revelation. It would be a meagre knowledge of "the deep things of God" that could be imparted to and appropriated by a Choctaw Indian on his Western reservation or a savage in his native forest. The requisite faculty for receiving a revelation may indeed be there, but it is found in him only remotely and radically, and needs to be developed by methods of education adapted to the nature and laws of mind.

Divine Revelation may be either *Natural* or *Supernatural*. Divine Revelation is Natural when God reveals Himself, His existence or His attributes through the light of human reason acting on the

works of God—on the world. All nature is an open book, from the study of which man, by the proper exercise of his intellectual faculties, can rise from the knowledge of the creature to the knowledge of the Creator, or from the existence of the effect can infer the existence of the first great cause, which is God. The Creation of the world is itself an instance of God's coming forth from the silent depths and vast solitudes of His mysterious Being. We must, of course, confess that not all men have as complete a knowledge of God as is mirrored forth in nature. But that is their own fault; for such knowledge has been placed within their reach. They have not put the right interpretation upon the facts of revelation. All men see the same sun, but not all see it alike. An astronomer sees more in it than does a savage. God's self-manifestation is made to a sinful race and through a distorted medium; for man's reason is darkened and his will is warped. Hence few men see the full revelation of God in nature. St. Paul insists in his Epistle to the Romans that the Gentiles were inexcusable for not having known God as they should have known Him.

Divine Revelation is Supernatural when God reveals Himself, His existence or his attributes, not by a process of reasoning, but by means belonging to the supernatural order.

The first difference, therefore, between Divine Natural and Divine Supernatural Revelation depends on the difference in the character of the *means* employed in making the communication. The means through which Natural Revelation reaches us belong to the system of nature's forces as manifested in the ordinary operations of the material world or even of the mental world. On the other hand, the means through which Supernatural Revelation reaches us are miracles or such other exceptional means as may not, strictly speaking, constitute miracles, but which nevertheless go beyond the limits of ordinary Providence. Briefly, in the one case, the channel of revelation is nature; in the other it is grace. As is evident, the distinction between these two kinds of revelation will depend on what is meant by nature and what by grace. By nature we here mean not only the external, material, physical, sensible universe which is governed by fixed laws, but also the facts belonging to the mental and moral constitution of man, to the course of human history and to the proper government of human society. Understood in this broad sense, nature is the world of matter and the world of men; grace is all else.

The second difference between Natural and Supernatural Revelation depends on their *Extent* or *Compass*, that is, on the number, clearness and general character of the truths taught by each Revelation. They differ as the part differs from the whole, as the obscure

from clear, as the foundation from the entire structure. Hence they are not inconsistent. They are not opposed. They cannot be contrasted, as is sometimes asserted. Belief in the existence of God, which is a fundamental truth of natural religion, is also a fundamental truth in supernatural religion, and must be presupposed before we can accept any revelation as coming from God. Thus natural revelation lies at the basis of all religion, and supernatural revelation gladly welcomes and appropriates to itself all the light that comes from reason and all the truth that can be learned about God from any data furnished by nature. However, supernatural revelation teaches truth with greater clearness and certainty, and inculcates duties with greater emphasis. By its very nature, therefore, supernatural revelation was intended, not to destroy or even contradict, but to complete and supplement natural revelation. Also as the one is through grace and the other is through nature, and as both grace and nature are from the same God, it must be clear that all appearances of antagonism between them should entirely vanish.

The third difference between natural revelation and supernatural revelation depends on the different *Purpose* for which each is given. If man were destined for a natural end and lived in what theologians call the "State of Pure Nature," that is, without original sin and without either supernatural grace or the preternatural gifts that accompany such grace, natural revelation might suffice; for then man, through natural revelation, would receive from God, the Author of nature, all the knowledge needed for such an end.

But, in the present order of things, natural revelation is inadequate. Man is now destined to a supernatural end and needs supernatural knowledge to know how to reach that end. But supernatural knowledge can be obtained only by supernatural revelation. As is evident, natural revelation can throw no light on many questions of the utmost importance to men who have been elevated to a supernatural state, and who have forfeited all right to it by sin. Natural revelation cannot teach us such truths as the Trinity, the Incarnation, the Atonement, Grace, Sacrifices, Sacraments, continued personal existence after death, the proper form of Divine worship, or any of those Divine decrees that depend, not on the essence of God which is unchangeable, but on the will of God which, precisely because it is free, can be this, that or the other way. It cannot tell us so much as one word about God's readiness to pardon repented sin nor about the conditions for obtaining pardon. It cannot supply the knowledge that we need about God's moral attributes, such as His mercy, His Fatherly love, or His tender compassion for His erring children; but only about His metaphysical attributes, such

as His Unity, His Immensity, His Infinity, His Eternity. It does not show us the patient, merciful and helpful side of the Divine nature, neither does it give us so much as one glimpse into the grand scheme of grace by which, from all eternity, God had determined to save the human race by the death of Jesus Christ.

We have seen that such truths as the Trinity and the Incarnation can be known only by supernatural revelation, while certain others, such as the Existence and Unity of God, can be known by the natural light of reason. Now, the first and immediate purpose of supernatural revelation is to make the first class of truths known, simply known, and to make the second class better known, known more clearly and with greater certainty, and to give them the necessary Divine confirmation and authority.

The more remote purpose of supernatural revelation is the self-manifestation of God as the God of mercy, grace and love, and as the Redeemer of a fallen race from sin and its consequences. In another order of things, it is true, this purpose might have been different. For if man had never sinned redemption from sin could not have been one of the purposes of revelation. But even in the hypothesis that man had never sinned, the Incarnation, which is the greatest and most perfect manifestation of God, could and, according to the Scotists, would have taken place for even nobler ends than the redemption of the race. However that may be, certain it is that sin has increased man's ignorance and misery and made supernatural revelation more imperatively necessary than ever. What is specially needed, in our present fallen state, is the revelation that God is a God of infinite love, mercy and compassion, that He is a loving Father ever ready to pardon His repentant children, and that He is the Restorer of the entire human family to the state of original innocency and sanctity from which they had fallen by their "unutterably great sin."

That "God's mercies are above all His works," natural revelation may convey some vague hint, but can give no certain knowledge. It might, at most, suggest that God is possessed of a certain degree of mild benevolence; but it is only supernatural revelation that could ever have uttered the astonishing words, "God so loved the world as to give His Only-Begotten Son, that whosoever believeth in Him may not perish, but may have everlasting life." Also that God is our Creator and Master, and that we are His servants, natural revelation may, indeed, make clear enough; but it is only supernatural revelation that could teach us that there exists a closer and dearer relationship between us and God, the relationship of children to a father. "You have not received the spirit of bondage again in fear; but you have received the spirit of adoption of children, whereby

we cry, Abba, Father. And if children, heirs also, heirs indeed of God and coheirs of Christ." (Romans, viii., 15.)

II. NATURAL REVELATION.

We know *that* God is and we know *what* He is, because He reveals Himself, His existence and His attributes through nature. St. Paul says that He was thus known to the Gentiles, and there is still stronger reason to believe that He was thus known to the early Hebrews and that some of this knowledge made its way into the Holy Scriptures.

We know that the visible world of matter and the invisible world of mind exist; because they reveal themselves by their activity. We learn from the science of Physics that nothing in nature is purely passive, but that all is also active. A stump or a stone, or any mass of apparently inanimate matter or inorganic substance is instinct with activity, and the molecules composing it, being forever in motion, thus make their presence known. As to the invisible spirits of our fellow-men, we know that they also exist, because through words and deeds and in other mysterious ways, which science fails adequately to explain, they make their presence felt to those around them, and so unmistakably felt that there can be no more doubt about the existence of the human soul than about the existence of the human body.

In a similar way God's existence is known. He exists; that we know, because He reveals Himself. In reality, it is not so much we who discover God as it is God who discovers Himself to us. St. Paul says: "That which is known of God is manifest to them (the Gentiles); for God manifested it to them." (Romans i., 19.) To the pagans, of whom St. Paul speaks, God manifested Himself, we may suppose, chiefly in the order and harmony that are everywhere evident in the world, and in the logical necessity for a First Cause of the world and of its continued existence. In each of these ways, and perhaps in other ways, the idea of God springs up in the mind under the suggestive power of the universe, requiring that some one should have created the world and continue to rule it. The idea is aroused by the play of thought in the action and reaction of reason on the external works of nature and of these on reason. There is something in the world of matter and in the world of men, something in the existence, in the forces, in the structure and in the movements of the grand universe in which we are placed that tends to originate and develop the notion of a Supreme Being in minds whose faculties are matured and in a normal condition. The Psalmist says: "The heavens declare the glory of God and the firmament showeth forth work of His hands." (Psalm xix., 1.) And the

Apostle no less categorically affirms: "For the invisible things of Him, from the creation of the world, are clearly seen, being perceived from the things that are made, also His eternal Power and Divinity, so that they are inexcusable." (Romans i., 20.)

The same arguments that prove *that* God is, prove also *what* He is. For the knowledge of His existence and the knowledge of His nature easily blend into one and become inseparable. Thus a due consideration of the world around us compels us to admit not only that God is, but also that He is Truth, Justice and Holiness; that He is self-existent, independent and superior to all limitations of time and place; that He is eternal in duration, ubiquitous in space and unlimited in knowledge; that He is infinite in power, the source of all perfection, the ground of all truth, the Cause of all things, the Sustainer of all things, the Ruler of all things and the Judge of all men.

Now, all these Divine attributes, which could possibly have been derived from natural revelation, are abundantly found in nearly every book of Holy Writ. Just how far, as a matter of fact, such notions about God were originally developed by the natural light of reason, and how far they were supernaturally revealed before being committed to writing in Sacred Scripture, is now neither possible nor necessary to determine. All that is now contended is that Scripture contains many religious truths which, considering their very nature, could have been revealed through reason, and whose presence in Scripture can be amply justified by an appeal to reason. The following are a few among innumerable instances of *Speculative* truths about God:

> "Thou, O Lord, in the beginning, didst lay the foundations of the earth,
> And the heavens are the work of Thy hands.
> They shall perish, but Thou shalt continue;
> And they shall all grow old as a garment,
> And as a vesture Thou shalt change them,
> And they shall be changed.
> But Thou art the self-same,
> And Thy years shall not fail."
>
> Psalm ci., 26; Hebrews i., 10-12.

> "Whither shall I fly from Thy spirit?
> Whither shall I go from Thy presence?
> If I ascend into heaven, Thou art there;
> If I descend into hell, Thou art there.
> If I take unto me the wings of the morning,
> And dwell in the uttermost parts of the sea;
> Even there shall Thy hand lead me;
> And Thy right hand hold me . . . .
> Darkness shall not be dark to Thee,
> And night be as light as the day."
>
> Psalm cxxxviii., 7-12.

As to the *Practical* side of natural revelation, it is found in all classes of books. In the Pentateuch the most important ethical document is the Decalogue or Ten Commandments, which rise before us in majesty as the guide of morality to the Jewish Synagogue

and the Christian Church, and which though subsequently revealed in a supernatural manner to Moses, is in great part based on the ethical law of nature and cannot be abrogated, and is as binding now as it was when God thundered it forth from the summit of Mount Sinai. However, Biblical ethics abound especially in the "Wisdom Literature" of the Old Testament, which was intended to have a direct practical bearing on conduct. It starts, of course, with the assumption of God's existence, and seeks by reason and reflection to understand God's way of dealing with the world, and to determine man's duties towards God better than they are explained in the Law or the Prophets. These Sapiential Books consist largely of shrewd observations on the ways of the world; of maxims, the product of the sage's own experience; of proverbs, the result of meditation and reflection on the ever varying phases of human life; and of practical advice, bearing on topics of domestic, social and civil affairs, on public policy and on the best means of getting on in the world. It has been said that this "wisdom" seems at times to proceed on the assumption that such virtue as is here recommended is of the utilitarian kind and is to be cultivated as a means to temporal happiness and worldly prosperity. "Honor the Lord with thy substance and thy barns shall be filled with abundance and thy wine presses shall run over with wine." (Prov. iii., 9.) But there is no question here of Christian ethics.

Some of the directions for regulating life and conduct, found in the Moral Books of the Old Testament, would seem to need even less supernatural revelation to make them known than the preceding.

"Hear thou, my son, and be wise,
And guide thy mind in the way.
Be not at the feast of the wine-bibbers;
Among gluttonous eaters of flesh;
For the drunkard and the glutton shall be consumed;
And sleepiness shall clothe a man with rags."

Prov. xxiii., 19-21.

"Go to the ant, O Sluggard;
Consider her ways and be wise;
Who, having neither guide, nor master, nor captain,
Provideth her food in the summer,
And gathereth her meat in the harvest.
How long wilt thou sleep, O Sluggard?
When wilt thou rise out of thy sleep?
Thou wilt sleep a little,
Thou wilt slumber a little,
Thou wilt fold thy hands a little to sleep;
And want shall come upon thee as a robber,
And poverty as an armed man."

Prov. vi., 6-12.

"Correct thy son and he will give thee rest;
The rod and reproof give wisdom;
But the child that is left to his own will,
Bringeth his mother to shame."

Prov. xxix., 15.

III. SUPERNATURAL REVELATION.

While a very superficial glance at certain books of Holy Writ will enable us to infer that much of their contents could have been originally derived from natural reason, by what is called universal revelation, we should not forget that there are everywhere in Scripture indications which point as clearly to the fact that very considerable portions of some of the books are of such a nature that they could not have been known except by supernatural revelation from heaven. That we may recognize and appreciate properly this important element in the Bible, we shall consider the (1) *Form* in which it is given and examine some of its (2) *Contents.*

As we have seen, Natural Revelation is *Universal,* because it is common to all men, in so far as they are endowed with reason. Not so Supernatural Revelation. It is *Special,* because it was at first given to but a few chosen ones, such as Moses, or Isaiah, in order that they should communicate it to others and mediately to all. And this is the method that God usually employs, "to use the few to bless the many." We are told that, in the past, while communicating His mind to men, God used a marvellous variety of means, "In sundry manners and in divers ways." Accordingly we find that supernatural revelations have been made through *Nations,* through *Individuals,* through *Laws,* through *Miracles,* through *Doctrines,* through *Histories,* through *Types,* through *Prophecies,* through *Theophanies,* the last and the greatest of which is the *Incarnation.* Let us consider these various

(A) FORMS OF SUPERNATURAL REVELATION.

The one *Nation* that was chosen to be the channel of grace and the bearer of truth to all the other nations of the world was the Hebrew people. Both natural and supernatural methods were employed in their training. Secular and spiritual influences were exercised in their schooling, so as to bring them to the knowledge of God and His ways. The process of preparing them to be the bearers of light to the rest of the world was steadily and painfully carried on through thousands of years, and when at last "the fulness of time had come," it was among this extraordinary people that the brave men and noble women were found who were ready to receive the torch of truth that had been lighted among them and hand it on to others.

The *Individuals* chosen to be the channels of grace to the world were generally men of the same nationality, men of high moral character and exceptional religious acquirements, men whom God had specially prepared to be the instruments of His will. Sometimes, from a moral point of view, they had their faults; yet they were men whom God knew how to use as instruments of good for His gracious purpose.

But among them all One there was to whom grace was given without measure, "the Chosen One," "the Beloved One," "the Holy One of Israel," who was not so much the channel of revelation as He was its very source, Himself the most perfect revelation of God. But of Him, apart.

Sometimes a knowledge of God and His attributes was revealed through *Laws* promulgated in Scripture and imposed with a sanction, so as to make God known as a God of Justice and Righteousness, and as an object of obedience.

Sometimes a knowledge of God and His attributes was revealed through the *Miracles* related in Scripture; for miracles, which are extraordinary Divine facts happening in the realm of external nature, prove that God is so mighty that He can do as He pleases in His own creation and that He will do as He pleases, for higher providential reasons.

Sometimes a knowledge of God and His attributes was revealed in Scripture in the form of direct and explicit *Doctrinal Statement.* It is a great yet common mistake to suppose that there can be no supernatural revelation of Divine truths unless they are expressed in the dry-as-chaff technical language and in the abstract formulæ so much in vogue among the schoolmen. This style of language, of course, has its place and can be made to serve a good purpose; but it is seldom found in Scripture. Biblical Revelation is generally the statement of concrete facts. It is the unveiling of God, a personal, living Being. It is the disclosure of His transcendent moral excellences displayed in deeds. It is the gradual unfolding, in time and place, of the grand scheme of Redemption through Jesus Christ. Hence it is given largely in the form of History and Biography. Divine truth may, indeed, be communicated in abstract forms and expressed in general propositions; but these are usually deduced from the concrete facts related in Scripture. Therefore, once the reader has ceased to look for revealed truth in Scripture, expressed in the form usually employed in modern systematic theology, he will find that the sacred pages are full to repletion with such ideas.

Sometimes a knowledge of God and His attributes was revealed through the historical facts related in Scripture. Indeed, *History* is one of the principal vehicles through which a knowledge of the Divine truths has been transmitted to posterity. With the inspired writer the case was not always as it is with us. The facts which he has recorded may not have been revealed to him. He may have learned them from reliable sources of information, or he may have been an eye witness of many of them. If so, it is not that God has revealed the facts, but that the facts have revealed God. In our case, God has revealed the facts and the facts have revealed God.

To us, who did not know them otherwise, those facts have been supernaturally revealed by God through the pages of Holy Writ. Many of the historical facts of the Bible, having been brought about providentially by God Himself, are the means by which His wonderful dealings with His people have been made known to all who in any reliable way, natural or supernatural, have acquired a knowledge of those facts. By what He has done in all ages of the past to save His people, God has proved Himself to be a God of infinite love and mercy. Thus the tragical death of Christ on the Cross, with all its accompaniments, is a fact of history; but what an astonishing exhibition of the love of God for man!

The Old Testament History differs from all other histories, because it contains a preparatory dispensation leading up to a permanent covenant, that was to succeed in the distant future and to last to the end of time. St. Paul speaks of the Old Testament as the pedagogue that led the children of God, the Father of men, to Jesus Christ, the Teacher of men. "The Law was a pedagogue to Christ." (Gal. iii., 24.) Thus the New Testament grew out of the Old and realized all the sublimest ideals of that older dispensation.

The Old Testament History differs from all other histories in this also, that while they refer exclusively to the past, this contains a considerable element pointing unmistakably to the far-off future, either to the first or to the second Coming of the great Redeemer of the world and bearing on many events not to be realized till the close of the Book, till "the latter days."

Sometimes a knowledge of God and His attributes was revealed through the *Types* of the Old Testament. In this connection the word Type generally denotes a prophetic similitude, by means of which something that is to come to pass in the future is symbolized and foretold. It is essential that the resemblance between the type and the antitype should have been purposely intended by God, the Author of both. Now it is well known that much of the Old Testament God intended to be a type of the New, a foreshadowing of the good things to come. Many of the privileges that God conferred on the chosen people, much of the Legislation that He prescribed for their religious instruction and proper government, the peculiar relationship which they, as "a holy nation," bore towards God, together with many of the chief personages who held high office in Church or State in the Jewish Commonwealth, all foreshadowed something that was to be realized on a grander scale in the life and work or in the person and character of Jesus Christ, or in the Church which He was to establish.

Adam and Noah, Abraham and Melchisadeck, Sarah and Hagar, Isaac and Ishmael, Joseph and Joshua, David and Solomon, the

Ark of the Covenant and the Paschal Lamb, the Scape-Goat and the Brazen Serpent, the pillar of fire by night and the pillar of cloud by day, and the Shekina or visible Divine Presence resting on the mercy seat in the Holy of Holies in the Temple were all so many shadows of things to come in the distant future. In fact, St. Paul, in his Epistles to the Corinthians, to the Galatians, and to the Hebrews, explains the entire Aaronic Ritual, with all its ceremonies and sacrifices, as foreshadowing the realities of the future Church of Christ.

As almost any one of these types bears so many and so remarkable resemblances to their corresponding antitypes, that there can be no doubt that they were divinely intended, what shall we think when dozens of such types are found, consisting of persons, events, things or institutions and described with the greatest variety and complexity of detail, yet all foreshadowing their antitypes in the remote future? St. Paul says: "Now all these things happened to them in figure; and they were written for our correction, upon whom the ends of the world are come." (I. Cor. x., 11.) "Which are a shadow of the things to come; but the body (substance) is Christ's." (Coll. ii., 17.) "Which serve as a shadow of heavenly things." (Heb. viii., 5.) "Which things are said by an allegory." (Gal. iv., 24.)

Sometimes a knowledge of God and His attributes was revealed through the *Prophecies* of Scripture. Much of the future that is predicted in the Bible is foretold directly, and not through the intervention of type and figure. Those direct Prophecies were made at a time and under circumstances when there was no indication in the course of events that such predictions cannot be ascribed to the shrewd political forecast, to the happy conjecture, or to the mental acumen of the Prophet, but must have come supernaturally from God. Combined, these prophetic glimpses into futurity form a long series of prophecies which, when fulfilled, are converted into a record of ancient historical events of prime importance to the History of Religion. Since many of the predictions of the early Prophets of Israel referred to the fate that overtook most of the neighboring nations, their fulfillment ever impressed more and more on the Hebrew mind that their God was not a mere local or national Deity, but was the one Universal God, who regulates the destinies of nations as well as the fate of individuals.

Another series of direct prophecies refers to the gradual development of the Messianic Idea, to the future establishment of "the Kingdom of God," and to the Redemption of the whole human race through Him "who was to come." But of this later on.

Since many of these predictions referred to events that were to happen only in a remote future, and that were dependent on

many unforeseen contingencies, and on the free will of so many unknown men not yet born, and bore on matters that were beyond the reach of human sagacity, their fulfilment makes it clear that the Hebrew Prophet read the future in the light of "Him who knows the end from the beginning," and proves to every reflecting mind that this very considerable portion of the contents of Scripture is also Divine.

Sometimes a knowledge of God and of His attributes was revealed in the form of *Theophanies*. By Theophany is generally meant a sensible manifestation of God. Such manifestations have been made in a great variety of ways. Some have been made through an audible voice, as when God spoke to Adam, Abraham or the other Patriarchs; some through the "Angel of Jehovah;" some through the pillar of fire and of the cloud; some through the Shekina, or visible presence of God on the wings of the cherubim; some through visions and prophetic dreams; some through various other displays of the glory and majesty of God; but principally through the Incarnation, Birth, Baptism, Transfiguration, Resurrection and Ascension of Jesus Christ.

The frequency of such apparitions and the distance in time and place at which they happened teach that God is not the mere local or national God of the Hebrews, but the God of all the earth; and that while He is so transcendent as to be above and beyond the universe, yet He is so immanent as to be everywhere present in the world—in it, but not of it. The Theophanies teach that God is not so far from any of us, and that, if we but reach out our hand to Him and feel after Him, we shall find Him.

If God is ubiquitous, if He is everywhere present in nature, if He pervades the universe, this truth could not have been more impressively taught than by these Theophanies, which prove, even to sense, that He is not so far off but that He can also be near, and a present help in time of need to all that call upon Him. "Thus saith the High and Lofty One who inhabiteth Eternity; the Holy One is His Name; I dwell in the Heights and in the Holy Place, and with those who are lowly and humble in spirit." (Isaiah lvii., 15.)

(B) CONTENTS OF SUPERNATURAL REVELATION.

Whatever else it may be, Scripture is a religious Book. To appreciate this statement at its proper value, we should know what is meant by religion. St. Thomas teaches that religion is a bond of union between God and man. It is, of course, a moral bond, because it exists between two intelligent and free beings, who are united by means of intelligence and free will. Now, the relation which religion establishes between God and man is the relation of

supreme dominion over man on the part of God and of absolute subjection to God on the part of man. In religion, then, there is an acknowledgment of the sovereignty of God and of the dependence of man and a voluntary expression of that relationship in acts of worship. The first part of this complex act, which consists in a knowledge of certain speculative truths to be believed about God and man, belongs to the intellect and is Theoretical; the second part, which consists of certain resultant duties to be performed towards God, concerns the will and is Practical. Now Scripture contains much Theoretical and much Practical knowledge, supernaturally revealed, about God, about man and about the God-man, Jesus Christ, and about their mutual relations.

As to the *Speculative* Teachings of Scripture, God's character is everywhere described in a manner worthy of the Supreme Being. His Unity, His Eternity, His Infinity, His Immensity, His Personality, His Self-Existence, His Perfection, His Wisdom, His Inscrutable Will, His Fatherly Compassion, His all-embracing Love, His unlimited Divine Presence, His Truthfulness, His Almighty Power, His Awful Sanctity, His Mysterious Divine Life, and all the moral excellences of His Being are, on nearly every page of Holy Writ, again and again insisted upon in a tone calculated to win Him the admiration, the reverence, the obedience and the love of every rational creature.

In fact, Scripture is full of God. While inspiring it, He must have breathed Himself into it. Accordingly the Book has thoughts above every human thought. It contains truths that penetrate the soul and arouse it as no other truths can arouse it. To the sorrowful, to the repentant, to the afflicted, to the abandoned, to all that long for light, and strength, and grace to do what is right and avoid what is evil, Scripture speaks of God and speaks of Him in such a manner as to inspire a love of truth, justice and holiness.

"Thus saith the High and Lofty One who inhabiteth Eternity;
The Holy One is His Name;
I dwell in the Heights and in the Holy Place,
And with the contrite and the humble of spirit,
To revive the spirit of the humble,
And to revive the heart of the contrite."

Isaiah lvii., 15.

"He was a man of sorrow and acquainted with infirmity;
He was wounded for our iniquities,
He was bruised for our sins,
And by his stripes we are healed;
And the Lord hath laid upon him the iniquity of us all.
He was led like a lamb to the slaughter;
For the wickedness of my people have I struck him."

Isaiah liii., 6-8.

"How lovely are Thy tabernacles, O Lord of Hosts!
My soul longeth and fainteth for the courts of the Lord.
My heart and my flesh have rejoiced in the living God.

For the sparrow hath found herself a home,
And the turtle dove a nest,
Where she may lay her young.
Thy altars, O Lord of Hosts, my King and my God.
Blessed are they that dwell in Thy house.
Blessed is the man whose help is in Thee.
I would rather be a door-keeper in the house of my God
Than dwell in the tabernacle of sinners.
For God loveth mercy and truth;
The Lord will give grace and glory.
Upon the harp will I give thanks to Thee, O God, my God."

Psalm lxxxiv., 1-12.

These are not isolated instances of the pure and lofty worship in which the soul is brought face to face with God in this wonderful collection of songs. In fact, the Psalter is full to overflowing with passages that breathe forth the deepest homage of the heart for God. Thus is this book a fitting symbol of the fearful struggle of the soul for all that is worth having, a struggle lasting a lifetime, a struggle full of pitfalls and lapses, full of conversions and tears of repentance, yet crowned with victory in the end.

"Have mercy on me, O Lord;
For I am alone and poor.
Keep Thou my soul and deliver me.
Show Thy ways to me and teach me Thy paths;
For Thou art my Saviour.
Wash me thoroughly from my sins,
And cleanse me from my iniquity.
Wash me and I shall be whiter than snow.
Turn away Thy face from my sins,
And blot out my iniquities.
Cast me not away from Thy face,
And take not Thy holy Spirit from me."

Psalm l., 6-8.

While a former shepherd boy sat on the throne of Israel, the recollections of his early youth, when he lovingly and tenderly followed and fed his flock on the hills around Bethlehem, furnished him with beautiful metaphors for the most touching psalms.

"The Lord is my Shepherd;
I shall want nothing.
He hath made me to lie down in green pastures;
He hath led me beside the restful waters.
He hath brought me in the paths of justice
For His Name's sake.
Though I should walk in the midst of the shadow of death,
I will fear no harm; for Thou art with me;
And Thy mercy will follow me all the days of my life,
And I shall dwell in the house of the Lord forever."

Psalm xxii.

As to *man*, nothing can be more noble than the speculative teachings of Scripture about his physical and moral nature. Man is represented as having been created immediately by God Himself; his body from the dust of the earth and his soul from the breath of God. Man was created after all other creatures, so as to show that he is the "Lord of the fowl and the brute," and that while all are subject to him, he is subject to God alone. He is also endowed with reason and free will to show that he must serve his Creator intelli-

gently and freely. He is adorned with grace and destined to a supernatural end, which consists in seeing God face to face in the Beatific Vision in heaven.

"What is man that Thou art mindful of him?
And the son of man that Thou didst visit him?
Thou hast crowned him with glory and honor,
And placed him over the works of Thy hands.
Thou hast put all things under his feet;
All sheep and oxen and the beasts of the field;
The birds of the air and fishes of the sea,
That pass through the paths of the sea,
Thou hast made him little lower than the angels."

Psalm viii., 5-9.

Finally, man having fallen from his high estate, a Redeemer is promised in the Old Testament and the completed work of Redemption is related in the New.

The *Practical* teachings of Scripture concerning man's duties to God, to himself, to his parents, to his neighbors and to society at large are so sublime, so profound, so perfect and so true to the majesty of God and so worthy of the exalted dignity of man that they must have been revealed by God Himself.

The Decalogue or Ten Commandments might be mentioned as a brief resume of our moral duties; for there, in a few words, our obligations, both negative and positive, are inculcated as is done in the code of no other ancient people. It is wonderfully well drafted. First come our duties towards God, then towards our parents, then towards our neighbors. As to the latter, the gradation should be noticed. A man's most precious blessing and the foundation of all the others is his life. His next greatest treasure in his wife. The next is his fortune. And finally his reputation. In the same order, murder, adultery, theft and calumny are forbidden. In what follows the gradation is no less remarkable and complete. For not only wicked deeds, but also wicked words are forbidden; and not only wicked words, but also wicked desires.

Elsewhere in Scripture our duties are described and insisted upon more in detail. We are told "to rise up before the gray head;" "to honor the person of the aged;" "to be honest in weight and measure;" and "to speak the truth every man to his neighbor." In the Gospels a higher order of morality is inculcated. "Thou shalt love the Lord thy God with thy whole heart, and with thy whole soul, and with thy whole mind. This is the greatest and the first commandment. And the second is like unto this: Thou shalt love thy neighbor as thyself." (Matt. xxii., 38.) "Love your enemies; do good to them that hate you; bless them that curse you; and pray for them that persecute and calumniate you; that you may be the children of your Father in heaven, who maketh His sun to rise upon the good and the bad, and raineth upon the just and the unjust; and

do unto others as you would that others should do unto you." (Matt. v., 44-46.)

Their civil and religious code imposed on the Hebrews the obligation of protecting the weak, the helpless and the downtrodden of every description. Nor can it be shown that the Constitution of any other people of antiquity takes so carefully into account the welfare of this class of persons as does the legislation of the Hebrews. For this reason it would be difficult to find in the code of any other people, unless borrowed from this, a law more humane and at the same time more Divine than the following: "Thou shalt not molest a stranger, neither shalt thou afflict a widow, or a fatherless child. (Ex. xxii., 22.) "The gleanings of thy olive tree, of thy harvest and of thy vineyard, thou shalt not return to take them, but thou shalt leave them for the stranger, and for the fatherless child, and for the widow." (Deut. xxiv., 20-22.)

A knowledge of God and of man and of their mutual relations was still further revealed through the *God-man*, whose life is related in the Holy Gospels. Jesus Christ is the Central Figure in history. Appearing on the border-line, where the two Testaments meet, the one pointing forward to Him and the other looking backward to Him, He filled both Prophet and Apostle with all the truth that they could contain and with more than they could impart. The Old Testament Revelation shines, but it shines, like the moon, with a borrowed light, with a light borrowed from Him. It is ever looking forward. It is ever approaching nearer and nearer to its source, and becoming more and more illumined by the light shining from Him. The golden age of the Old Testament Revelation was not in the past, as was the case with all other ancient nations, but in the future. It was the age in which the long expected Messiah was to be the light of the world. In fact, the Messianic idea is the golden thread that runs through the entire fabric of the Old Testament, warp and woof, and gives to it whatever beauty or value it possesses. Of a truth, the Old Testament existed for Him, and without Him it would never have existed. Somewhat unlike His mother, the Jewish Synagogue, who bore Him and then expired, the Old Testament is still pregnant with Christ. "Lex gravida Christo." If you take Him out of the Old Testament, what remains? If you take Him out, what is the remainder worth? Worth as much as the figure without the reality; or the shadow without the substance; or the shell without the kernel. "For to Him all the Prophets give testimony." (Acts x., 43.) And not only the Prophets, but all the Laws, all the Doctrines, all the Types, all the Miracles, all the Histories, all the Ritual Observances, all the Theophanies, all the Teachings, both Theoretical and Practical, of the Old Testament lead up to Him, prepare the way for His

Coming, and, like converging rays of light, point to Him, who is the "Promised One," and are all absorbed in the sunshine of His blessed countenance. "For Christ is the end of the Law." (Rom. x., 4.)

Beginning with the vague prediction that the Saviour of the race was to be "the seed of the woman," the Old Testament Prophecies grow ever more and more definite as time rolls on. It was foretold that He was to be of the family of Abraham, then of Isaac, then of Jacob, then of the tribe of Judah, then of the royal line of David and Solomon, then of a Virgin; that He was to be born in Bethlehem and after seventy weeks of years; that He would be both a glorious and a suffering Messiah; and that He was to be Priest, and Prophet, and King, and more than man. These and many other circumstances regarding the life and character of the future Redeemer are described in all the beauty of poetic numbers, with all the magnificence of Oriental imagery and with an ever increasing accuracy of detail to the end. In fact, so clear, so itemized, so circumstantial are some of the Messianic prophecies of Isaiah, written about B. C. 700, that, if the verbs were uniformly expressed in the past tense, as they often are, the author would appear to have written, not a Prophecy, but a history and might be considered a fifth Evangelist.

Indeed, so thoroughly did the faith of the Hebrews in a Messiah fashion their character and arouse their hopes that, while other ancient nations have looked back to a golden age in a remote past, the Israelites alone have ever looked forward to a golden age in the future, when the great Deliverer, upon whose head are many benedictions, would arise from among their own brethren and rule the destinies of nations. And what is still more strange, so deep was the impression made on the minds of neighboring nations by these prophecies of the Jews that there prevailed throughout the Orient the expectation that a King was to be born who was destined to rule the world.

At length the fulness of time is come. The Messianic age arrives. The long delay is ended. Salvation is nigh. He is here. The rude outline, roughly drafted by Moses in the early chapters of Genesis, was filled out by successive Prophets, as by so many artists, till the life-colors glowed on the canvas and, at the appointed time, He "who was to come," He who was "the Expected of the nations," "the Desired of the eternal hills," "the End of the Law," and the realization of all the Old Testament ideals, drew aside the veil of prophecy and stood before the world in the human garb of the divine Rabbi of Nazareth.

Henceforth Revelation shall no more be given through Seer or Prophet. "God, who at sundry times and in divers manners, in times past, spoke to the fathers through the prophets, last of all, in

these days, hath spoken to us through His Son, . . . by whom also He made the world." (Hebrews i., 1-2.) The Logos, the Eternal Word, the Second Person of the Trinity, having revealed God through the Prophets of old, now becomes man Himself, and through this man He becomes the perfect revelation, the completed revelation, the final revelation of God to man, the revelation of grace, and love, and mercy, and righteousness, and redemption, the revelation which can never be surpassed or even equaled, the revelation of "God manifested in the flesh."

But how is it that Jesus Christ is the most perfect revelation of God? How is it that His deeds, even when not accompanied by words or other verbal expressions, are a revelation at all? The answer to these questions should not be difficult to grasp once the fact and the nature of the Incarnation of the Son of God are properly understood.

Jesus Christ is the only Being in whom the two natures, human and Divine, are combined in such a way as to form but one individual, one person, a person who is at the same time both God and man, God from all eternity, made man in time. For, without ceasing to be God, as He was from everlasting, the Logos, the Second Person of the Blessed Trinity, took to Himself a perfect human nature, consisting of soul and body, and thus began to be man. He clothed Himself in our nature as in a garment, to show us how we also should wear the same garb. He folded Himself in our nature, as in an external form or medium, through which He might become visible, tangible and accessible to us. By becoming man, He never ceased to be a Person, and the human nature never began to be a Person, but was, from the first moment of its existence, united to the Person of the Eternal Word.

This union between the human and the Divine in Jesus Christ is a personal or hypostatical union, like the union between the soul and body of man, a union so close as to make but one person of the two natures, one individual, one principle of action, one responsible agent. This union is so intimate that the person of the divine Word is the only person that remains, and He so dominates and directs the human nature in Christ as to become the only agent responsible for all the actions of Jesus Christ. Therefore, all that was ever said or done or thought by the man Jesus Christ was said or done or thought by the second person of the Trinity, who is at the same time both God and man. From this it follows that all the acts of the head, or of the hand, or of the heart, all the thoughts, desires, emotions and affections of the human soul of Christ were perfectly conformable to the mind of God. They were God's acts and thoughts, and they revealed God to the world. And because God

dwelt in Christ and made use of His human nature to communicate His own mind to men, it follows that to see Christ, to hear Christ, to be taught by Christ was the same as to see God, to hear God and to be taught by God. Thus it is that, while men looked upon the human countenance of Christ, and conversed with Him, and heard His human language, and observed His human mode of life, they were in direct communication with God Himself and were receiving Divine revelations through all that He said or did.

One necessary result of the Incarnation is that the intellect of Christ knows nothing but what is true, and the will of Christ loves nothing but what is good. Hence all that He says or does or wills is a supernatural revelation of the mind of God. If, then, Christ loved the poor, or forgave sinners, or dined with publicans, or drove the buyers and sellers out of the Temple, or cast out devils, or cursed the barren fig tree, or fasted whole days, or passed the night in prayer, or was present at a marriage feast, or obeyed the laws of the land, or commanded to give to Cæsar what belongs to Cæsar, or allowed Himself to be called the Son of David, or the Son of man, or the Son of God, or sacrificed His life for others, the mere fact that He did such things is proof conclusive that it was at least lawful for Him to do them under the circumstances, and that we may imitate His example. Thus such deeds, even when not accompanied by words, are a revelation of the mind of God in our regard. His every act was a revelation of God.

Jesus Christ is the Person revealing, and the Person revealed, and the revelation itself. For though He revealed Himself by His words, yet He revealed Himself still more luminously by His works, by His example and by His whole life. And it is especially by His voluntary death on the Cross to save sinners that He has revealed Himself as the God of infinite justice and of infinite love and mercy. He revealed Himself more by what He did and by what He was, than by what He said. He is the perfect revelation. For no matter how well revelation may have been made through the prophets of old, all that is as nothing when compared with that more luminous revelation that flashed from the eyes, and beamed from the face, and welled up from the heart, and flowed from the lips of Him who is "the Way, the Truth and the Life," and "the Light of every man that cometh into the world." Augustine says: "Facta Verbi verba sunt." And Gregory adds: "Dominus et Salvator noster, . . . aliquando nos sermonibus, aliquando vero operibus admonet. Ipsa Ejus Facta Præcepta sunt; quia dum aliquid tacitus facit, quid agere debeamus, innotescit." Yet what we know about His life, His work and His character we learn from the Holy Gospels.

This statement is confirmed by Leo XIII. in one of his official

utterances. In his latest and noblest Encyclical "On Jesus Christ Our Redeemer," he says: "We beg all Christians throughout the world to strive all they can to know their Redeemer as He really is. . . . There is nothing more salutary than His law; there is nothing more Divine than His teaching. . . . You should look upon it as the chief part of your duty to engrave upon the minds of your people the true knowledge and the very image of Jesus Christ; to explain His Love, His Mercies, and His Teachings by your writings, and by your words, in Schools and Universities, and from the Pulpit, and wherever an opportunity is offered. . . . This devotion we should hand on to the New Century as a pledge of better times to come." Elsewhere in the same document he says: "The greatest of all misfortunes is never to have known Jesus Christ."

But where is this knowledge of Jesus Christ to be found? This question Leo XIII. answers very forcibly in his Encyclical "On the Study of Holy Scripture," where we read, "Nowhere is there anything more fully or more clearly expressed in regard to the Saviour of the world than is to be found in the entire range of the Bible." St. Jerome says: "To be ignorant of the Scriptures is to be ignorant of Jesus Christ." In its pages the Image of Jesus Christ stands out living and breathing and diffusing everywhere around consolation in trouble, encouragement to virtue and attraction to the love of God.

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SANCTISSIMI DOMINI NOSTRI LEONIS, DIVINA PROVIDENTIA PAPAE XIII., EPISTOLA ENCYCLICA.

AD PATRIARCHAS, PRIMATES, ARCHIEPISCOPOS, EPISCOPOS, ALIOSQVE LOCORVM ORDINARIOS

PACEM ET COMMVNIONEM CVM APOSTOLICA SEDE HABENTES.

Venerabiles Fratres, Salvtem et Apostolicam Benedictionem.

GRAVES de communi re oeconomica disceptationes, quae non una in gente iam dudum animorum labefactant concordiam, crebrescunt in dies calentque adeo, ut consilia ipsa hominum prudentiorum suspensa merito habeant et sollicita. Eas opinionum fallaciae, in genere philosophandi agendique late diffusae, invexere

primum. Tum nova, quae tulit aetas, artibus adiumenta, commeatuum celeritas et adscita minuendae operae lucrisque augendis omne genus organa, contentionem acuerunt. Denique, locupletes inter ac proletarios, malis turbulentorum hominum studiis, concitato dissidio, eo res iam est deducta, ut civitates saepius agitatae motibus, magnis etiam videantur calamitatibus funestandae.

Nos quidem, pontificatu vix inito, probe animadvertimus quid civilis societas ex eo capite periclitaretur; officiique esse duximus catholicos monere palam, quantus in socialismi placitis lateret error, quantaque immineret inde pernicies, non externis vitae bonis tantummodo, sed morum etiam probitati religiosaeque rei. Huc spectarunt litterae encyclicae "Quod Apostolici muneris," quas dedimus die XXVIII. decembris anno MDCCCLXXVIII.—Verum, periculis iis ingravescentibus maiore quotidie cum damno privatim publice, iterum Nos eoque enixius ad providendum contendimus. Datisque similiter litteris "Rerum novarum," die XV. maii anno MDCCCXCI., de iuribus et officiis fuse diximus, quibus geminas civium classes, eorum qui rem et eorum qui operam conferunt, congruere inter se oporteret; simulque remedia ex evangelicis praescriptis monstravimus, quae ad tuendam iustitiae et religionis causam, et ad dimicationem omnem inter civitatis ordines dirimendam visa sunt in primis utilia.

Nec vero Nostra, Deo dante, irrita cessit fiducia. Siquidem vel ipsi qui a catholicis dissident, veritatis vi commoti, hoc tribuendum Ecclesiae professi sunt, quod ad omnes civitatis gradus se porrigat providentem, atque ad illos praecique qui misera in fortuna versantur. Satisque uberes ex documentis Nostris catholici percepere fructus. Nam inde non incitamenta solum viresque hauserunt ad coepta optima persequenda; sed lucem etiam mutuati sunt optatam, cuius beneficio huiusmodi disciplinae studia tutius ii quidem ac felicius insisterent. Hinc factum ut opinionum inter eos dissensiones, partim submotae sint, partim mollitae interquieverint. In actione vero, id consecutum est ut ad curandas proletariorum rationes, quibus praesertim locis magis erant afflictae, non pauca sint constanti proposito vel nove inducta vel aucta utiliter; cuiusmodi sunt: ea ignaris oblata auxilia, quae vocant secretariatus populi; mensae ad ruricolarum mutuationes; consociationes, aliae ad suppetias mutuo ferendas, aliae ad necessitates ob infortunia levandas; opificum sodalitia; alia id genus et societatum et operum adiumenta.

Sic igitur, Ecclesiae auspiciis, quaedam inter catholcos tum coniunctio actionis tum institutorum providentia inita est in praesidium plebis, tam saepe non minus insidiis et periculis quam inopia et laboribus circumventae. Quae popularis beneficentiae ratio nullâ quidem propria appellatione initio distingui consuevit: *socialismi christiani*

nomen a nonnullis invectum et derivata ab eo haud immerito obsoleverunt. Eam deinde pluribus iure nominare placuit *actionem christianam popularem.* Est etiam ubi, qui tali rei dant operam, *sociales christiani* vocantur: alibi vero ipsa vocatur *democratia christiana,* ac *democratici christiani* qui eidem dediti; contra eam quam socialistae contendunt *democratiam socialem.* Iamvero e binis rei significandae modis postremo loco allatis, si non adeo primus, *sociales christiani,* alter certe, *democratia christiana,* apud bonos plures offensionem habet, quippe cui ambiguum quiddam et periculosum adhaerescere existiment. Ab hac enim appellatione metuunt, plus unâ de causa: videlicet, ne quo obtecto studio popularis civitas foveatur, vel ceteris politicis formis praeoptetur; ne ad plebis commoda, ceteris tamquam semotis rei publicae ordinibus, christianae religionis virtus coangustari videatur: ne denique sub fucato nomine quoddam lateat propositum legitimi cuiusvis imperii, civilis, sacri, detrectandi. Qua de re quum vulgo iam nimis et nonnumquam acriter disceptetur, monet conscientia officii ut controversiae modum imponamus, definientes quidnam sit a catholicis in hac re sentiendum: praeterea quaedam praescribere consilium est, quo amplior fiat ipsorum actio, multoque salubrior civitati eveniat.

Quid *democratia socialis* velit, quid velle *christianam* oporteat, incertum plane esse nequit. Altera enim, plus minusve intemperanter eam libeat profiteri, usque eo pravitatis a multis compellitur, nihil ut quidquam supra humana reputet; corporis bona atque externa consectetur, in eisque captandis fruendis hominis beatitatem constituat. Hinc imperium penes plebem in civitate velint esse, ut, sublatis ordinum gradibus aequatisque civibus, ad bonorum etiam inter eos aequalitatem sit gressus: hinc ius dominii delendum; et quidquid fortunarum est singulis, ipsaque instrumenta vitae, communia habenda. At vero *democratia christiana,* eonimirum quod christiana dicitur, suo veluti fundamento, positis a divina fide principiis niti debet, infimorum sic prospiciens utilitatibus, ut animos ad sempiterna factos convenienter perficiat. Proinde nihil sit illi iustitiâ sanctius; ius potiundi possidendi iubeat esse integrum; dispares tueatur ordines, sane proprios bene constitutae civitatis; eam demum humano convictui velit formam atque indolem esse, qualem Deus auctor indidit. Liquet igitur *democratiæ socialis* et *christianæ* communionem esse nullam: eae nempe inter se differunt tantum, quantum socialismi secta et professio christianae legis.

Nefas autem sit christianae democratiae appellationem ad politica detorqueri. Quamquam enim *democratia,* ex ipsa notatione nominis usuque philosophorum, regimen indicat populare; attamen in re praesenti sic usurpanda est, ut, omni politica notione detracta, aliud nihil significatum praeferat, nisi hanc ipsam beneficam in populum

actionem christianam. Nam naturae et evangelii praecepta quia suopte iure humanos casus excedunt, ea necesse est ex nullo civilis regiminis modo pendere; sed convenire cum quovis posse, modo ne honestati et iustitiae repugnet. Sunt ipsa igitur manentque a partium studiis variisque eventibus plane aliena: ut in qualibet demum rei publicae constitutione, possint cives ac debeant iisdem stare praeceptis, quibus iubentur Deum super omnia, proximos sicut se diligere. Haec perpetua Ecclesiae disciplina fuit; hac usi Romani Pontifices cum civitatibus egere semper, quocumque illae administrationis genere tenerentur. Quae quum sint ita, catholicorum mens atque actio, quae bono proletariorum promovendo studet, eo profecto spectare nequaquam potest, ut aliud prae alio regimen civitatis adamet atque invehat.

Non dissimili modo a democratia christiana removendum est alterum illud offensionis caput: quod nimirum in commodis inferiorum ordinum curas sic collocet, ut superiores praeterire videatur; quorum tamen non minor est usus ad conservationem perfectionemque civitatis. Praecavet id christiana, quam nuper diximus, caritatis lex. Haec ad omnes omnino cuiusvis gradus homines patet complectendos, utpote unius eiusdemque familiae, eodem benignissimo editos Patre et redemptos Servatore, eamdemque in hereditatem vocatos aeternam. Scilicet, quae est doctrina et admonitio Apostoli: "Unum corpus, et unus spiritus, sicut vocati estis in una spe vocationis vestrae. Unus Dominus, una fides, unum baptisam. Unus Deus et Pater omnium, qui est super omnes, et per omnia, et in omnibus nobis." (Ephes. iv., 4-6.) Quare propter nativam plebis cum ordinibus ceteris coniunctionem, eamque arctiorem ex christiana fraternitate, in eosdem certe influit quantacumque plebi adiutandae diligentia impenditur; eo vel magis quia ad exitum rei secundum plane decet ac necesse est ipsos in partem operae advocari, quod infra aperiemus.

Longe pariter absit, ut appellatione democratiae christianae propositum subdatur omnis abiiciendae obedientiae eosque aversandi qui legitime praesunt. Revereri eos qui pro suo quisque gradu in civitate praesunt, eisdemque iuste iubentibus obtemperare, lex aeque naturalis et christiana praecipit. Quod quidem ut homine eodemque christiano sit dignum, ex animo et officio praestari oportet, scilicet *propter conscientiam*, quemadmodum ipse monuit Apostolus, quum illud edixit: "Omnis anima potestatibus sublimioribus subdita sit." (Rom. xiii., 1, 5.) Abhorret autem a professione christianae vitae, ut quis nolit iis subesse et parere, qui cum potestate in Ecclesia antecedunt: Episcopis in primis, quos, integrâ Pontificis Romani in universos auctoritate, "Spiritus Sanctus posuit regere Ecclesiam Dei, quam acquisivit sanguine suo." (Act xx., 28.) Iam qui secus

sentiat aut faciat, is enimvero gravissimum eiusdem Apostoli praeceptum oblitus convincitur: "Obedite praepositis vestris, et subiacete eis. Ipsi enim pervigilant, quasi rationem pro animabus vestris reddituri." (Hebr. xiii., 17.) Quae dicta permagni interest ut fideles universi alte sibi defigant in animis atque in omni vitae consuetudine perficere studeant: eademque sacrorum ministri diligentissime reputantes, non hortatione solum, sed maxime exemplo, ceteris persuadere ne intermittant.

His igitur revocatis capitibus rerum, quas ante hac per occasionem datâ operâ illustravimus, speramus fore ut quaevis de christianae democratiae nomine dissensio, omnisque de re, eo nomine significata, suspicio periculi iam deponatur. Et iure quidem speramus. Etenim, iis missis quorumdam sententiis de huiusmodi democratiae christianae vi ac virtute, quae immoderatione aliqua vel errore non careant; certe nemo unus studium illud reprehenderit, quod, secundum naturalem divinamque legem, eo unice pertineat, ut qui vitam manu et arte sustentant, tolerabiliorem in statum adducantur, habeantque sensim quo sibi ipsi prospiciant; domi atque palam officia virtutum et religionis libere expleant; sentiant se non animantia sed homines, non ethnicos sed christianos esse; atque adeo ad *unum* illud *necessarium*, ad ultimum bonum, cui nati sumus, et facilius et studiosius nitantur. Iamvero hic finis, hoc opus eorum qui plebem christiano animo velint et opportune relevatam et a peste incolumem socialismi.

De officiis virtutum et religionis modo Nos mentionem consulto iniecimus. Quorumdam enim opinio est, quae in vulgus manat, *quaestionem socialem*, quam aiunt, *oeconomicam* esse tantummodo: quum contra verissimum sit, eam moralem in primis et religiosam esse, ob eamdemque rem ex lege morum potissime et religionis iudicio dirimendam. Esto namque ut operam locantibus geminetur merces; esto ut contrahatur operi tempus; etiam annonae sit vilitas: atqui, si mercenarius eas audiat doctrinas, ut assolet, eisque utatur exemplis, quae ad exuendam Numinis reverentiam alliciant depravandosque mores, eius etiam labores ac rem necesse est dilabi. Periclitatione atque usu perspectum est, opifices plerosque anguste misereque vivere, qui, quamvis operam habeant breviorem spatio et uberiorem mercede, corruptis tamen moribus nullâque religionis disciplina vivunt. Deme animis sensus, quos inserit et colit christiana sapientia; deme providentiam, modestiam, parsimoniam, patientiam ceterosque rectos naturae habitus: prosperitatem, etsi multum contendas, frustra persequare. Id plane est causae, cur catholicos homines inire coetus ad meliora plebi paranda, aliaque similiter instituta invehere Nos nunquam hortati sumus, quin pariter moneremus, ut haec religione auspice fierent eâque adiutrice et comite.

Videtur autem propensae huic catholicorum in proletarios voluntati eo maior tribuenda laus, quod in eodem campo explicatur, in quo constanter feliciterque, benigno afflatu Ecclesiae, actuosa caritatis certavit industria, accommodate ad tempora. Cuius quidem mutuae caritatis lege, legem iustitiae quasi perficiente, non sua solum iubemur cuique tribuere ac iure suo agentes non prohibere; verum etiam gratificari invicem, "non verbo, neque lingua, sed opere et veritate" (I. Ioann. iii., 18); memores quae Christus peramanter ad suos habuit: "Mandatum novum do vobis: ut diligatis invicem, sicut dilexi vos, ut et vos diligatis invicem. In hoc cognoscent omnes quia discipuli mei estis, si dilectionem habueritis ad invicem." (Ioann. xiii., 34-35.) Tale gratificandi studium, quamquam esse primum oportet de animorum bono non caduco sollicitum, praetermittere tamen haudquaquam debet quae usui sunt et adiumento vitae. Qua in re illud est memoratu dignum, Christum, sciscitantibus Baptistae discipulis: "Tu es qui venturus es, an alium expectamus?" demandati sibi inter homines muneris arguisse causam ex hoc caritatis capite, Isaiae excitatâ sententia: "Caeci vident, claudi ambulant, leprosi mundantur, surdi audiunt, mortui resurgunt, pauperes evangelizantur." (Matth. xi., 5.) Idemque de supremo iudicio ac de praemiis poenisque decernendis eloquens, professus est se singulari quadam respecturum ratione, qualem homines caritatem alter alteri adhibuissent. In quo Christi sermone id quidem admiratione non vacat, quemadmodum ille, partibus misericordiae solantis animos tacite omissis, externae tantum commemorarit officia, atque ea tamquam sibimetipsi impensa: "Esurivi, et dedistis mihi manducare; sitivi, et dedistis mihi bibere; hospes eram, et collegistis me; nudus, et cooperuistis me; infirmus, et visitastis me; in carcere eram, et venistis ad me." Ib. xxv., 35-36.)

Ad haec documenta caritatis utrâque ex parte, et animae et corporis bono, probandae, addidit Christus de se exempla, ut nemo ignorat, quam maxime insignia. In re praesenti sane suavissima est ad recolendum vox ea paterno corde emissa: "Misereor super turbam" (Marc. viii., 2), et par voluntas ope vel mirifica subveniendi: cuius miserationis praeconium extat: "Pertransiit benefaciendo et sanando omnes oppressos a diabolo." (Act x., 38.) Traditam ab eo caritatis disciplinam Apostoli primum sancte naviterque coluerunt; post illos qui christianam fidem amplexi sunt auctores fuerunt inveniendae variae institutorum copiae ad miserias hominum quaecumque urgeant, allevandas. Quae instituta, continuis incrementis provecta, christiani nominis partaeque inde humanitatis propria ac praeclara sunt ornamenta: ut ea integri iudicii homines satis admirari non queant, maxime quod tam sit proclive ut in sua quisque feratur commoda, aliena posthabeat.

Neque de eo numero bene factorum excipienda est erogatio stipis, eleemosynae causâ; ad quam illud pertinet Christi: "Quod superest, date eleemosynam." (Luc. xi., 41.) Hanc scilicet socialistae carpunt atque e medio sublatam volunt, utpote ingenitae homini nobilitati iniuriosam. At enim si ad evangelii praescripta (Matth. vi., 2-4), et christiano ritu fiat, illa quidem neque erogantium superbiam alit, neque affert accipientibus verecundiam. Tantum vero abest ut homini sit indecora, ut potius foveat societatem coniunctionis humanae, officiorum inter homines fovendo necessitudinem. Nemo quippe hominum est adeo locuples, qui nullius indigeat; nemo est egenus adeo, ut non alteri possit qua re prodesse: est id innatum, ut opem inter se homines et fidenter poscant et ferant benevole. Sic nempe iustitia et caritas inter se devinctae, aequo Christi mitique iure, humanae societatis compagem mire continent, ac membra singula ad proprium et commune bonum providenter adducunt.

Quod autem laboranti plebi non temporariis tantum subsidiis, sed constanti quadam institutorum ratione subveniatur, caritati pariter laudi vertendum est; certius enim firmiusque egentibus stabit. Eo amplius est in laude ponendum, velle eorum animos, qui exercent artes vel operas locant, sic ad parsimoniam providentiamque formari, ut ipsi sibi decursu aetatis, saltem ex parte consulant. Tale propositum, non modo locupletum in proletarios officium elevat, sed ipsos honestat proletarios; quos quidem dum excitat ad clementiorem sibi fortunam parandam, idem a periculis arcet et ab intemperantia coërcet cupiditatum, idemque ad virtutis cultum invitat. Tantae igitur quum sit utilitatis ac tam congruentis temporibus, dignum certe est in quo caritas bonorum alacris et prudens contendat.

Maneat igitur, studium istud catholicorum solandae erigendaeque plebis plane congruere cum Ecclesiae ingenio et perpetuis eiusdem exemplis optime respondere. Ea vero quae ad idconducant, utrum *actionis christianæ popularis* nomine appellentur, an *democratiae christianæ*, parvi admodum refert; si quidem impertita a Nobis documenta, quo par est obsequio, integra custodiantur. At refert magnopere ut, in tanti momenti re, una eademque sit catholicorum hominum mens, una eademque voluntas atque actio. Nec refert minus ut actio ipsa, multiplicatis hominum rerumque praesidiis, augeatur, amplificetur. Eorum praesertim advocanda est benigna opera, quibus et locus et census et ingenii animique cultura plus quiddam auctoritatis in civitate conciliant. Ista si desit opera, vix quidquam confici potest quod vere valeat ad quaesitas popularis vitae utilitates. Sane ad id eo certius breviusque patebit iter, quo impensius multiplex praestantiorum civium efficientia conspiret. Ipsi autem considerent velimus non esse sibi in integro, infimorum curare sortem an negligere; sed officio prorsus teneri. Nec enim

suis quisque commodis tantum in civitate vivit, verum etiam communibus: ut, quod alii in summam communis boni conferre pro parte nequeant, largius conferant alii qui possint. Cuius quidem officii quantum sit pondus ipsa edocet acceptorum bonorum praestantia, quam consequatur necesse est restrictior ratio, summo reddenda largitori Deo. Id etiam monet malorum lues, quae, remedio non tempestive adhibito, in omnium ordinum perniciem est aliquando eruptura: ut nimirum qui calamitosae plebis negligat causam, ipse sibi et civitati faciat improvide. Quod si actio ista christiano more socialis late obtineat vigeatque sincera, nequaquam profecto fiet, ut cetera instituta, quae ex maiorum pietate ac providentia iam pridem extant et florent, vel exarescant vel novis institutis quasi absorpta deficiant. Haec enim atque illa, utpote quae eodem consilio religionis et caritatis impulsa, neque re ipsa quidquam inter se pugnantia, commode quidem componi possunt et cohaerere tam apte, ut necessitatibus plebis periculisque quotidie gravioribus eo opportunis liceat, collatis benemerendi studiis, consulere. Res nempe clamat, vehementer clamat, audentibus animis opus esse viribusque coniunctis; quum sane nimis ampla aerumnarum seges obversetur oculis, et perturbationum exitialium impendeant, maxime ab invalescente socialistarum vi, formidolosa discrimina. Callide illi in sinum invadunt civitatis: in occultorum conventuum tenebris ac palam in luce, qua voce qua scriptis, multitudinem seditione concitant; disciplinâ religionis abiecta, officia negligunt, nil nisi iura extollunt; ac turbas egentium quotidie frequentiores sollicitant, quae ob rerum angustias facilius deceptioni patent et ad errorem rapiuntur. Aeque de civitate ac de religione agitur res; utramque in suo tueri honore sanctum esse bonis omnibus debet.

Quae voluntatum consensio ut optato consistat, ab omnibus praeterea abstinendum est contentionis causis quae offendant animos et disiungant. Proinde in ephemeridum scriptis et concionibus popularibus sileant quaedam subtiliores neque ullius fere utilitatis quaestiones, quae quum ad expediendum non faciles sunt, tum etiam ad intelligendum vim aptam ingenii et non vulgare studium exposcunt. Sane humanum est, haerere in multis dubios et diversos diversa sentire: eos tamen qui verum ex animo persequantur addecet, in disputatione adhuc ancipiti, aequanimitatem servare ac modestiam mutuamque observantiam; ne scilicet, dissidentibus opinionibus, voluntates item dissideant. Quidquid vero, in causis quae dubitationem non respuant, opinari quis malit, animum sic semper gerat, ut Sedi Apostolicae dicto audiens esse velit religiosissime.

Atque ista catholicorum actio, qualiscumque est, ampliore quidem cum efficacitate procedet, si consociationes eorum omnes, salvo suo cuiusque iure, unâ eademque primaria vi dirigente et movente pro-

cesserint. Quas ipsis partes in Italia volumus praestat institutum illud, *a Congressibus coetibusque catholicis*, saepenumero a Nobis laudatum: cui et Decessor Noster et Nosmetipsi curam hanc demandavimus communis catholicorum actionis, auspicio et ductu sacrorum Antistitum, temperandae. Item porro fiat apud nationes ceteras, si quis usquam eiusmodi est praecipuus coetus, cui id negotii legitimo iure sit datum.

Iamvero in toto hoc rerum genere, quod cum Ecclesiae et plebis christianae rationibus omnino copulatur, apparet quid non elaborare debeant qui sacro munere fungantur, et quam variâ doctrinae, prudentiae, caritatis industria id possint. Prodire in populum in eoque salutariter versari opportunum esse, prout res sunt ac tempora, non semel Nobis, homines e clero allocutis, visum est affirmare. Saepius autem per litteras ad Episcopos aliosve sacri ordinis viros, etiam proximis annis (Ad Ministrum Generalem Ordinis Fratrum Minorum, die XXV. nov. an MDCCCLXXXXVIII.), datas, hanc ipsam amantem populi providentiam collaudavimus, propriamque esse diximus utriusque ordinis clericorum. Qui tamen in eius officiis explendis caute admodum prudenterque faciant, ad similitudinem hominum sanctorum. Franciscus ille pauper et humilis, ille calamitosorum pater Vincentius a Paulo, alii in omni Ecclesiae memoria complures, assiduas curas in populum sic temperare consueverunt, ut non plus aequo distenti neque immemores sui, contentione pari suum ipsi animum ad perfectionem virtutis omnis excolerent. Unum hic libet paulo expressius subiicere, in quo non modo sacrorum administri, sed etiam quotquot sunt popularis causae studiosi, optime de ipsa, nec difficili opera, mereantur. Nempe, si pariter studeant per opportunitatem haec praecipue in plebis anima fraterno alloquio inculcare. Quae sunt: a seditione, a seditiosis usquequaque caveant; aliena cuiusvis iura habeant inviolata; iustam dominis observantiam atque operam volentes exhibeant; domesticae vitae ne fastidiant consuetudinem multis modis frugiferam; religionem in primis colant, ab eaque in asperitatibus vitae certum petant solatium. Quibus perficiendis propositis sane quanto sit adiumento vel Sanctae Familiae Nazarethanae praestantissimum revocare specimen et commendare praesidium, vel eorum proponere exempla quos ad virtutis fastigium tenuitas ipsa sortis eduxit, vel etiam spem alere praemii in potiore vita mansuri.

Postremo id rursus graviusque commonemus, ut quidquid consilii in eadem causa vel singuli vel consociati homines efficiendum suscipiant, meminerint Episcoporum auctoritati esse penitus obsequendum. Decipi se ne sinant vehementiore quodam caritatis studio; quod quidem, si quam iacturam debitae obtemperationis suadeat, sincerum non est, neque solidae utilitatis efficiens, neque gratum

Deo. Eorum Deus delectatur animo qui, sententiâ sua postposita, Ecclesiae praesides sic plane ut ipsum audiunt iubentes; iis volens adest vel arduas molientibus res, coeptaque ad exitus optatos solet benignus perducere. Ad haec accedant consentanea virtutis exempla, maxime quae christianum hominem probant osorem ignaviae et voluptatum, de rerum copia in alienas utilitates amice impertientem, ad aerumnas constantem, invictum. Ista quippe exempla vim habent magnam ad salutares spiritus in populo excitandos; vimque habent maiorem, quum praestantiorum civium vitam exornant.

Haec vos, Venerabiles Fratres, opportune ad hominum locorumque necessitates, pro prudentia et navitate vestra curetis hortamur; de iisdemque rebus consilia inter vos, de more congressi, communicetis. In eo autem vestrae evigilent curae atque auctoritas valeat, moderando, cohibendo, obsistendo, ut ne, ullâ cuiusvis specie boni fovendi, sacrae disciplinae laxetur vigor, neu perturbetur ordinis ratio quem Christus Ecclesiae suae praefinivit. Recta igitur et concordi et progrediente catholicorum omnium operâ, eo pateat illustrius, tranquillitatem ordinis veramque prosperitatem in populis praecipue florere, moderatrice et fautrice Ecclesia; cuius est sanctissimum munus, sui quemque officii ex christianis praeceptis admonere, locupletes ac tenues fraterna caritate coniungere, erigere et roborare animos in cursu humanarum rerum adverso.

Praescripta et optata Nostra confirmet ea beati Pauli ad Romanos, plena apostolicae caritatis, hortatio: "Obsecro vos. . . . Reformamini in novitate sensus vestri. . . . Qui tribuit, in simplicitate; qui praeest, in sollicitudine; qui miseretur, in hilaritate. Dilectio sine simulatione. Odientes malum, adhaerentes bono: Caritate fraternitatis invicem diligentes; honore invicem praevenientes: Sollicitudine non pigri: Spe gaudentes; in tribulatione patientes; orationi instantes: Necessitatibus sanctorum communicantes; hospitalitatem sectantes. Gaudere cum gaudentibus, flere cum flentibus: Idipsum invicem sentientes: Nulli malum pro malo reddentes: Providentes bona non tantum coram Deo, sed etiam coram omnibus hominibus." (xii., 1-17.)

Quorum auspex bonorum accedat Apostolica benedictio, quam vobis, Venerabiles Fratres, Clero ac populo vestro amantissime in Domino impertimus.

Datum Romae apud Sanctum Petrum die XVIII. ianuarii anno MDCCCCI, Pontificatus Nostri vicesimo tertio.

LEO PP. XIII.

APOSTOLICAL LETTER OF OUR HOLY FATHER LEO XIII., BY DIVINE PROVIDENCE POPE.

TO THE PATRIARCHS, PRIMATES, ARCHBISHOPS, BISHOPS AND OTHER ORDINARIES IN PEACE AND COMMUNION WITH THE APOSTOLIC SEE.

Venerable Brothers, Health and Apostolic Benediction.

THE grave discussions on economical questions which for some time past have disturbed the peace of several countries of the world are growing in frequency and intensity to such a degree that the minds of thoughtful men are filled, and rightly so, with worry and alarm. These discussions take their rise in the bad philosophical and ethical teaching which is now widespread among the people. The changes also which the mechanical inventions of the age have introduced, the rapidity of communication between places and the devices of every kind for diminishing labor and increasing gain all add bitterness to the strife; and lastly matters have been brought to such a pass by the struggle between capital and labor, fomented as it is by professional agitators, that the countries where these disturbances most frequently occur find themselves confronted with ruin and disaster.

At the very beginning of our Pontificate we clearly pointed out what the peril was which confronted Society on this head, and we deemed it our duty to warn Catholics, in unmistakable language, how great the error was which was lurking in the utterances of Socialism, and how great the danger was that threatened not only their temporal possessions, but also their morality and religion. That was the purpose of our Encyclical Letter *Quod Apostolici Muneris*, which we published on the 18th of December, in the year 1878; but as these dangers day by day threatened still greater disaster, both to individuals and the Commonwealth, we strove with all the more energy to avert them. This was the object of our Encyclical *Rerum Novarum* of the 15th May, 1891, in which we dwelt at length on the rights and duties which both classes of Society—those namely, who control capital, and those who contribute labor—are bound in relation to each other; and at the same time we made it evident that the remedies which are most useful to protect the cause of religion, and to terminate the contest between the different classes of Society, were to be found in the precepts of the Gospel.

Nor, with God's grace, were our hopes entirely frustrated. Even

those who are not Catholics, moved by the power of truth, avowed that the Church must be credited with a watchful care over all classes of Society, and especially those whom fortune had least favored. Catholics, of course, profited abundantly by these letters, for they not only received encouragement and strength for the admirable enterprises in which they were engaged, but also obtained the light they desired, by the help of which they were able with greater safety and with more plentiful blessings to continue the efforts which they had been making in the matter of which we are now speaking. Hence it happened that the differences of opinion which prevailed among them were either removed or their acrimony diminished and the discussion laid aside. In the work which they had undertaken this was effected, viz.: that in their efforts for the elevation of the poorer classes, especially in those places where the trouble is greatest, many new enterprises were set on foot; those which were already established were increased and all reaped the blessing of a greater stability imparted to them. Some of these works were called *Bureaus of the People*, their object being to supply information. Rural Savings Banks had been established, and various associations, some for mutual aid, others, of relief, were organized. There were Working Men's Societies and other enterprises for work or beneficence. Thus under the auspices of the Church, united action of Catholics was secured as well as wise discrimination exercised in the distribution of help for the poor who are often as badly dealt with by chicanery and exploitation of their necessities as they are oppressed by indigence and toil. These schemes of popular benevolence were, at first, distinguished by no particular appellation. The name of *Christian Socialism* with its derivatives which was adopted by some was very properly allowed to fall into disuse. Afterwards some asked to have it called *The Popular Christian Movement*. In the countries most concerned with this matter there are some who are known as *Christian Socialists*. Elsewhere the movement is described as *Christian Democracy*, and its partisans *Christian Democrats*, in contradistinction to those who are designated as *Socialists*, and whose system is known as *Social Democracy*. Not much exception is taken to the former, *i. e.*, *Christian Socialism*, but many excellent men find the term *Christian Democracy* objectionable. They hold it to be very ambiguous, and for this reason open to two objections. It seems by implication to covertly favor popular government, and to disparage other methods of political administration. Secondly, it appears to belittle religion by restricting its scope to the care of the poor, as if the other sections of Society were not of its concern. More than that, under the shadow of its name there might easily lurk a design to attack all legitimate power, either civil or

sacred. Wherefore, since this discussion is now so widespread, so exaggerated and so bitter, the consciousness of duty warns us to put a check on this controversy and to define what Catholics are to think on this matter. We also propose to describe how the movement may extend its scope and be made more useful to the Commonwealth.

What *Social Democracy* is and what *Christian Democracy* ought to be, assuredly no one can doubt. The first, with due consideration to the greater or less intemperance of its utterance, is carried to such an excess by many as to maintain that there is really nothing existing above the natural order of things, and that the acquirement and enjoyment of corporal and external goods constitute man's happiness. It aims at putting all government in the hands of the people, reducing all ranks to the same level, abolishing all distinction of class, and finally introducing community of goods. Hence, the right of ownership is to be abrogated, and whatever property a man possesses, or whatever means of livelihood he has, is to be common to all.

As against this, *Christian Democracy*, by the fact that it is Christian, is built, and necessarily so, on the basic principles of Divine Faith, and provides for the betterment of the masses, with the ulterior object of availing itself of the occasion to fashion their minds for things which are everlasting. Hence, for *Christian Democracy* justice is sacred; it must maintain that the right of acquiring and possessing property cannot be impugned, and it must safeguard the various distinctions and degrees which are indispensable in every well-ordered Commonwealth. Finally it must endeavor to preserve in every human society the form and the character which God ever impresses on it. It is clear, therefore, that there is nothing in common between *Social* and *Christian Democracy*. They differ from each other as much as the sect of Socialism differs from the profession of Christianity.

Moreover, it would be a crime to distort this name of *Christian Democracy* to politics, for although democracy, both in its philological and philosophical significations, implies popular government, yet in its present application it is to be employed that, removing from it all political significance, it is to mean nothing else than a benevolent and Christian movement in behalf of the people. For the laws of nature and of the Gospel, which by right are superior to all human contingencies, are necessarily independent of all modifications of civil government, while at the same time they are in concord with everything that is not repugnant to morality and justice. They are, therefore, and they must remain absolutely free from political parties, and have nothing to do with the various changes of admin-

istration which may occur in a nation; so that Catholics may and ought to be citizens according to the constitution of any State, guided as they are by those laws which command them to love God above all things, and their neighbors as themselves. This has always been the discipline of the Church. The Roman Pontiffs acted upon this principle whenever they dealt with different countries, no matter what might be the character of their governments. Hence, the mind and the action of Catholics who are devoted to the amelioration of the working classes can never be actuated with the purpose of favoring and introducing one government in place of another.

In the same manner, from *Christian Democracy*, we must remove another possible subject of reproach, namely: that while looking after the advantage of the working people they should act in such a manner as to forget the upper classes of Society; for they also are of the greatest use in preserving and perfecting the Commonwealth. As we have explained, the Christian law of charity will prevent us from so doing. For it extends to all classes of Society, and all should be treated as members of the same family, as children of the same Heavenly Father, as redeemed by the same Saviour, and called to the same eternal heritage. Hence the doctrine of the Apostle who warns us that: "we are one body and one spirit called to the one hope in our vocation; one Lord, one Faith and one Baptism; one God and the Father of all who is above all, and through all, and in us all." Wherefore on account of the nature of the union which exists between the different classes of Society and which Christian brotherhood makes still closer, it follows that no matter how great our devotion may be in helping the people, we should all the more keep our hold upon the upper classes, because association with them is proper and necessary, as we shall explain later on, for the happy issue of the work in which we are engaged.

Let there be no question of fostering under this name of *Christian Democracy* any intention of diminishing the spirit of obedience, or of withdrawing people from their lawful rulers. Both the natural and the Christian law command us to revere those who, in their various grades, are above us in the State, and to submit ourselves to their just commands. It is quite in keeping with our dignity as men and Christians to obey, not only exteriorly, but from the heart, as the Apostle expresses it, *for conscience' sake*, when he commands us to keep our soul subject to the higher powers. It is abhorrent to the profession of a Christian for any one to be unwilling to be subject and obedient to those who rule in the Church, and first of all to the bishops whom (without prejudice to the universal power of the Roman Pontiff) "the Holy Ghost has placed to rule the Church of

God which Christ has purchased by His blood." (Acts xx., 28.) He who thinks or acts otherwise is guilty of ignoring the grave precept of the Apostle who bids us to obey our rulers and to be subject to them, for they watch, having to give an account of our souls. Let the faithful everywhere implant these principles deep in their souls, and put them in practice in their daily life, and let the ministers of the Gospel meditate them profoundly, and incessantly labor not merely by exhortation but especially by example to make them enter into the souls of others.

We have recalled these matters which on other occasions we have made the subject of our instructions, in the hope that all dissension about the name of *Christian Democracy* will cease and that all suspicion of any danger coming from what the name signifies will be put at rest. And with reason do we hope so; for neglecting the opinions of certain men, with regard to the power and the efficacy of this kind of *Christian Democracy*, which at times are exaggerated and are not free from error, let no one, however, condemn that zeal which, according to the natural and Divine law, has this for its object, viz.: to make the condition of those who toil more tolerable; to enable them to obtain, little by little, those means by which they may provide for the future; to help them to practice in public and in private the duties which morality and religion inculcate; to aid them to feel that they are not animals but men, not heathens but Christians, and so to enable them to strive more zealously and more eagerly for the one thing which is necessary, viz.: that ultimate good for which we are all born into this world. This is the intention; this is the work of those who wish that the people should be animated by Christian sentiments and should be protected from the contamination of Socialism which threatens them.

We have designedly made mention here of virtue and religion. For, it is the opinion of some, and the error is already very common, that the social question is merely an economic one, whereas in point of fact, it is above all a moral and religious matter, and for that reason must be settled by the principles of morality and according to the dictates of religion. For even though wages are doubled and the hours of labor are shortened and food is cheapened, yet if the workingman hearkens to the doctrines that are taught on this subject, as he is prone to do, and is prompted by the examples set before him to throw off respect for God and to enter upon a life of immorality, his labors and his gain will avail him naught.

Trial and experience have made it abundantly clear that many a workman lives in cramped and miserable quarters, in spite of his shorter hours and larger wages, simply because he has cast aside the restraints of morality and religion. Take away the instinct which

Christian virtue has planted and nurtured in men's hearts, take away prudence, temperance, frugality, patience and other correct natural habits, no matter how much he may strive, he will never achieve prosperity. That is the reason why we have incessantly exhorted Catholics to enter these associations for bettering the condition of the laboring classes, and to organize other undertakings with the same object in view; but we have likewise warned them that all this should be done under the auspices of religion, with its help and under its guidance.

The zeal of Catholics on behalf of the masses is especially noteworthy by the fact that it is engaged in the very field in which, under the benign inspiration of the Church, the active industry of charity has always labored, adapting itself in all cases to the varying exigencies of the times. For the law of mutual charity perfects, as it were, the law of justice, not merely by giving each man his due and in not impeding him in the exercise of his rights, but also by befriending him in case of need, "not with the word alone, or the lips, but in deed and in truth;" being mindful of what Christ so lovingly said of His own: "A new commandment I give unto you, that you love one another as I have loved you, that you love also one another. By this shall all men know that you are my disciples, if you have love one for the other." This zeal in coming to the rescue of our fellow-men should, of course, be solicitous, first for the imperishable good of the soul, but it must not neglect what is necessary and helpful for the body.

We should remember what Christ said to the disciples of the Baptist who asked him: "Art thou he that art to come or look we for another?" He invoked, as the proof of the mission given to Him among men, His exercise of charity, quoting for them the text of Isaias: "The blind see, the lame walk, the lepers are cleansed, the deaf hear, the dead rise again, the poor have the Gospel preached to them." (Matth. xi., 5.) And speaking also of the last judgment and of the rewards and punishments He will assign, He declared that He would take special account of the charity men exercised towards each other. And in that discourse there is one thing that especially excites our surprise, viz.: that Christ omits those works of mercy which comfort the soul and refers only to external works which, although done in behalf of men, He regards as being done to Himself. "For I was hungry and you gave Me to eat; I was thirsty and you gave Me to drink; I was a stranger and you took Me in; naked and you covered Me; sick and you visited Me; I was in prison and you came to Me." (Matth. xxv., 35.)

To the teachings which enjoin the twofold charity of spiritual and corporal works, Christ adds His own example so that no one may

fail to recognize the importance which He attaches to it. In the present instance we recall the sweet words that came from His paternal heart: "I have pity on the multitude" (Mark vii., 2), as well as the desire He had to assist them even if it were necessary to invoke His miraculous power. Of His tender compassion we have the proclamation made in Holy Writ, viz.: that "He went about doing good and healing all that were oppressed by the devil." (Acts x., 38.) This law of charity which He imposed upon His apostles, they in the most holy and zealous way put into practice; and after them those who embraced Christianity originated that wonderful variety of institutions for alleviating all the miseries by which mankind is afflicted. And these institutions carried on and continually increased their powers of relief and were the especial glories of Christianity and of the civilization of which it was the source, so that right-minded men never fail to admire those foundations, aware as they are of the proneness of men to concern themselves about their own and neglect the needs of others.

Nor are we to eliminate from the list of good works the giving of money for charity, in pursuance of what Christ has said: "But yet that which remaineth, give alms." (Luke xi., 41.) Against this, the Socialist cries out and demands its abolition as injurious to the native dignity of man. But if it is done in the manner which the Scripture enjoins (Matth. vi., 2), and in conformity with the true Christian spirit, it neither connotes pride in the giver or inflicts shame upon the one who receives. Far from being dishonorable for man it draws closer the bonds of human society by augmenting the force of the obligation of the duties which men are under with regard to each other. No one is so rich that he does not need another's help; no one so poor as not to be useful in some way to his fellow-man; and the disposition to ask assistance from others with confidence, and to grant it with kindness is part of our very nature. Thus justice and charity are so linked with each other, under the equable and sweet law of Christ, as to form an admirable cohesive power in human society and to lead all of its members to exercise a sort of providence in looking after their own and in seeking the common good as well.

As regards not merely the temporary aid given to the laboring classes, but the establishment of permanent institutions in their behalf, it is most commendable for charity to undertake them. It will thus see that more certain and more reliable means of assistance will be afforded to the necessitous. That kind of help is especially worthy of recognition which forms the minds of mechanics and laborers to thrift and foresight so that in course of time they may be able, in part at least, to look out for themselves. To aim at that is

not only to dignify the duty of the rich towards the poor, but to elevate the poor themselves; for while it urges them to work for a better degree of comfort in their manner of living, it preserves them meantime from danger by checking extravagance in their desires, and acts as a spur in the practice of the virtues proper to their state. Since, therefore, this is of such great avail and so much in keeping with the spirit of the times, it is a worthy object for charity to undertake with all prudence and zeal.

Let it be understood, therefore, that this devotion of Catholics to comfort and elevate the mass of the people is in keeping with the spirit of the Church and is most conformable to the examples which the Church has always held up for imitation. It matters very little whether it goes under the name of "*The Popular Christian Movement*," or "*Christian Democracy*," if the instructions that have been given by Us be fully carried out with the submission that is due. But it is of the greatest importance that Catholics should be one in mind, will and action in a matter of such great moment. And it is also of importance that the influence of these undertakings should be extended by the multiplication of men and means devoted to the same object.

Especially must there be appeals to the kindly assistance of those whose rank, worldly wealth and culture give them importance in the community. If their help is excluded, scarcely anything can be done which will be of any assistance for the wants which now clamor for satisfaction in this matter of the well-being of the people. Assuredly the more earnestly many of those who are prominent in the State conspire effectively to attain that object the quicker and surer will the end be reached. We wish them to understand that they are not at all free to look after or neglect those who happen to be beneath them, but that it is a strict duty which binds them. For no one lives only for his personal advantage in a community; he lives for the common good as well, so that when others cannot contribute their share for the general object, those who can do so are obliged to make up the deficiency. The very extent of the benefits they have received increases the burden of their responsibility, and a stricter account will have to be rendered to God who bestowed those blessings upon them. What should also urge all to the fulfillment of their duty in this regard is the widespread disaster which will eventually fall upon all classes of Society if this assistance does not arrive in time; and therefore is it that he who neglects the cause of the distressed poor is not doing his duty to himself or to the State.

If this social movement extends its scope far and wide in a true Christian fashion, and grows in its proper and genuine spirit, there will be no danger, as is feared, that those other institutions, which

the piety of our ancestors have established and which are now flourishing, will decline or be absorbed by new foundations. Both of them spring from the same root of charity and religion, and not only do not conflict with each other, but can be made to coalesce and combine so perfectly as to provide by a union of their benevolent resources in a more efficacious manner against the graver perils and necessities of the people which confront us to-day.

The condition of things at present proclaims, and proclaims vehemently, that there is need for a union of brave minds with all the resources they can command. The harvest of misery is before our eyes, and the dreadful projects of the most disastrous national upheavals are threatening us from the growing power of the socialistic movement. They have insidiously worked their way into the very heart of the State, and in the darkness of their secret gatherings, and in the open light of day, in their writings and their harangues, they are urging the masses onward to sedition; they fling aside religious discipline, they scorn duties and clamor only for rights; they are working incessantly on the multitudes of the needy which daily grow greater, and which, because of their poverty, are easily deluded and hurried off into ways that are evil. It is equally the concern of the State and of Religion, and all good men should deem it a sacred duty to preserve and guard both in the honor which is their due.

That this most desirable agreement of wills should be maintained, it is essential that all refrain from giving any causes of dissension in hurting and alienating the minds of others. Hence in newspapers and in speeches to the people, let them avoid subtle and useless questions which are neither easy to solve nor to understand except by minds of unusual ability and only after the most serious study. It is quite natural for people to think differently in doubtful questions, but those who address themselves to these subjects in a proper spirit will preserve their mental calm and not forget the respect which is due to those who differ from them. If minds see things in another light it is not necessary to become alienated forthwith. To whatever opinion a man's judgment may incline, if the matter is yet open to discussion, let him keep it, provided his mental attitude is such that he is ready to yield if the Holy See should otherwise decide.

This Catholic action, of whatever description it may be, will work with greater effect if all of the various associations, while preserving their individual rights, move together under one primary and directive force.

In Italy we desire that this directive force should emanate from the Catholic Congresses and Reunions so often praised by us, to further which our predecessor and we ourselves have ordered that these meetings should be controlled and guided by the Bishops of

the country. So let it be for other nations, in case there be any leading organization of this description to which this matter has been legitimately entrusted.

Now in all questions of this sort where the interests of the Church and the Christian people are so closely allied, it is evident what they who are in the sacred ministry should do, and it is clear how industrious they should be in inculcating right doctrine and in teaching the duties of prudence and charity. To go out and move among the people, to exert a healthy influence on them by adapting themselves to the present condition of things is what more than once in addressing the clergy we have advised. More frequently also in writing to the Bishops and other dignitaries of the Church, and especially of late (to the Minister General of the Minorites, November 25, 1898,) we have lauded this affectionate solicitude for the people and declared it to be the especial duty of both the secular and regular clergy. But in the fulfillment of this obligation let there be the greatest caution and prudence exerted, and let it be done after the fashion of the saints. Francis, who was poor and humble, Vincent of Paul, the Father of the afflicted classes, and very many others whom the Church keeps ever in her memory, were wont to lavish their care upon the people, but in such wise as not to be engrossed overmuch or to be unmindful of themselves or to let it prevent them from laboring with the same assiduity in the perfection of their own soul and the cultivation of virtue.

There remains one thing upon which we desire to insist very strongly, in which not only the ministers of the Gospel, but also all those who are devoting themselves to the cause of the people, can with very little difficulty bring about a most commendable result. That is to inculcate in the minds of the people, in a brotherly way and whenever the opportunity presents itself, the following principles, viz.: to keep aloof on all occasions from seditious acts and seditious men; to guard inviolate the rights of others; to show a proper respect to superiors; to willingly perform the work in which they are employed; not to grow weary of the restraint of family life which in many ways is so advantageous; to keep to their religious practices above all, and in their hardships and trials to have recourse to the Church for consolation. In the furtherance of all this, it is very efficacious to propose the splendid example of the Holy Family of Nazareth, and to advise the invocation of its protection, and it also helps to remind the people of the examples of sanctity which have shone in the midst of poverty, and to hold up before them the reward that awaits them in the better life to come.

Finally we recur again to what we have already declared and we insist upon it most solemnly, viz.: that whatever projects individuals

or associations form in this matter should be done with due regard to Episcopal authority and absolutely under Episcopal guidance. Let them not be led astray by an excessive zeal in the cause of charity. If it leads them to be wanting in proper submission it is not a sincere zeal; it will not have any useful result and cannot be acceptable to God. God delights in the souls of those who put aside their own designs and obey the rulers of His Church as if they were obeying Him; He assists them even when they attempt difficult things and benignly leads them to their desired end. Let them show also examples of virtue, so as to prove that a Christian is a hater of idleness and indulgence, that he gives willingly from his goods for the help of others, and that he stands firm and unconquered in the midst of adversity. Examples of that kind have a power of moving people to dispositions of soul that make for salvation, and have all the greater force as the condition of those who give them is higher in the social scale.

We exhort you, Venerable Brethren, to provide for all this, as the necessities of men and of places may require, according to your prudence and your zeal, meeting as usual in council to combine with eath other in your plans for the furtherance of these projects. Let your solicitude watch and let your authority be effective in controlling, compelling, and also in preventing, lest any one under the pretext of good should cause the vigor of sacred discipline to be relaxed or the order which Christ has established in His Church to be disturbed. Thus by the correct, concurrent and ever-increasing labor of all Catholics, the truth will flash out more brilliantly than ever, viz.: that truth and true prosperity flourish especially among those peoples whom the Church controls and influences: and that she holds it as her sacred duty to admonish every one of what the law of God enjoins, to unite the rich and the poor in the bonds of fraternal charity, and to lift up and strengthen men's souls in the times when adversity presses heavily upon them.

Let our commands and our wishes be confirmed by the words which are so full of apostolic charity which the Blessed Paul addressed to the Romans: "I beseech you therefore, brethren, be reformed in the newness of your mind; he that giveth, with simplicity; he that ruleth, with carefulness; he that showeth mercy with cheerfulness. Let love be without dissimulation—hating that which is evil; clinging to that which is good; loving one another with the charity of brotherhood; with honor preventing one another; in carefulness, not slothful; rejoicing in hope; patient in tribulation; instant in prayer. Communicating to the necessities of the saints. Pursuing hospitality. Rejoice with them that rejoice; weep with them that weep; being of one mind to one another; to no man ren-

dering evil for evil; providing good things not only in the sight of God but also in the sight of men."

As a pledge of these benefits receive the Apostolic Benediction which, Venerable Brethren, we grant most lovingly in the Lord to you and your clergy and people.

Given at Rome in St. Peter's the 18th day of January, 1901, in the 23d year of our Pontificate.

LEO XIII., POPE.

Scientific Chronicle.

ARTIFICIAL VS. NATURAL INDIGO.

The synthetic process of building up in the chemical laboratory products which were known only as the results of the natural development of plant life, has in the past caused the abandonment of certain kinds of plant culture. This was shown in a striking way in regard to the madder plant. As late as 1870 this plant was extensively cultivated to obtain the important dye-stuff alizarin. But in 1869 a process for manufacturing this dye by fusing anthraquinone sulphonic acid and caustic soda was patented, and as a consequence the cultivation of the madder plant was abandoned. Now that such rapid strides have been made in the production of synthetic or artificial indigo the fate of the natural product is eagerly discussed by those interested.

England is most interested, for if natural indigo is driven out of the market the wealth of her Indian possessions would be temporarily, if not permanently, diminished. The indigo plant is cultivated principally in the provinces of Bengal, Madras and Oude, India. The seed is sown at the end of March or the beginning of April, and by the 1st of July, when it is cut, the plant has attained its full growth, a height of about three feet. About the beginning of September a second crop, somewhat smaller than the first, is cut. The land on which the indigo plant grows is often very poor, and very little attention is given to enriching it by fertilizers, the only manure employed being *seet*, that is indigo refuse, leaves and stalks taken from the vats after the steeping of the plants. Still the yearly yield is about the same in quantity and quality.

The process of extracting the indigo from the plant is briefly this: After the cutting the plants are tied into bundles and packed into large cement lined vats, where they are covered with clear fresh water. The plants remain in these vats until the process of fermentation, which begins quickly and lasts about 15 hours, is completed. The yellow colored liquor is then drawn off into other vats, where it is agitated either by oars worked by hand or else by machinery. During this beating the indigo separates out in blue flakes which precipitate to the bottom of the vat. When the indigo has thoroughly settled the water is drawn off and the remaining pulpy mass

is boiled with water to remove impurities, then filtered and pressed and cut into cubes and finally air dried.

The method of cultivating the plant and the process of extracting the indigo are certainly old-fashioned and in a great measure dependant on the whim of the grower and manufacturer. There has been no attempt to improve the fertilizer or to discover whether it can be improved or not. Their fathers used seet, and so did their grandfathers, and therefore the present growers use seet. No expert chemist is employed to improve the process of manufacture. Should the bundles be packed tightly or loosely in the vat? Should the water used be hard or soft? Should the plants be steeped 10, 15 or 20 hours? These questions are all answered not on a scientific basis, but according to the whim of the individual.

English scientists have awakened to the fact that something must be done to improve the methods of cultivating the indigo plant and of manufacturing the indigo if this industry is to be spared the fate of the madder industry. Artificial indigo, which is about to crowd out the natural, is the result principally of the work of German chemists and the liberality of German firms that spend large sums of money in perfecting the process of manufacture.

The process employed by the Badische Auilin und Soda Fabrik Company is that of Heumann, in which phenylglycine-ortho-carboxylic acid is fused with caustic soda. At first this process yielded a product which cost more than the natural indigo. But the Badische Company employs more than 100 highly trained research chemists, and to some of these was entrusted the work of devising a way of producing phenylglycine-ortho-carboxylic acid more cheaply. As the starting product they took naphthalene, which is obtained from coal tar in very large quantities. This they oxidized by concentrated sulphuric acid in the presence of mercury or a mercury salt with the production of phthalic acid. This acid is then reacted upon to form anthranilic acid. The latter combined with monochloracetic acid yields the desired phenylglycine-ortho-carboxylic acid.

During the process large quantities of sulphur dioxide are produced, the loss of which would be a serious matter, for on the scale on which indigo is manufactured from 25,000 to 30,000 tons of sulphur dioxide are annually produced. This is not lost, but passed over heated oxide of iron and converted into sulphuric anhydride, which by the action of water is converted into profitable sulphuric acid. In the manufacture of indigo chlorine is required to prepare the chloracetic acid and caustic soda is needed to fuse the phenylglycine-ortho-carboxylic acid. Both of these are obtained by the electrolysis of sodium chloride. The mere mention of these processes

shows what has been done for artificial indigo and what an active opponent the natural product has to contend with.

That the competition is and will be a sharp one may be gathered from the fact that at present the price of artificial and of natural indigo is about the same. The Indigo Planters' Association is awakened. They have employed Mr. Rawson, an expert chemist, to improve the method of manufacturing the natural product, and appeals have been made to the government, which has responded by ordering that all the cloth supplied the army and navy be dyed with *natural* indigo. The question will undoubtedly depend on whether the artificial indigo can be made in sufficient quantities and sold at a lower price. It is quite safe to say that it will, seeing the energy displayed so far in its manufacture. The Badische Company alone has spent nearly $5,000,000 in improving the manufacture of artificial indigo, and other companies like the "Farben Fabrik" are following this lead. It is safe to predict that the indigo industry will pass from England to Germany, the supply being furnished not by the fields of India, but by the laboratories of Germany.

This is another instance of the success that attends an alliance between science and industry and pointedly stated last September in an address by Professor Carhardt to the American Institute of Electrical Engineers. After mentioning some details with regard to the large sums of money spent in scientific work in Germany, he says: "The results have already justified, in a remarkable manner, all the expenditure of labor and money. The renown in exact scientific measurements formerly possessed by France and England has now largely been transferred to Germany. Formerly scientific workers in the United States looked to England for exact standards, especially in the department of electricity; now they go to Germany." And again: "Germany is rapidly moving toward industrial supremacy in Europe. One of the most potent factors in this notable advance is the perfected alliance between science and commerce existing in Germany. Science has come to be regarded there as a commercial factor. If England is losing her supremacy in manufacture and in commerce, as many claim, it is because of English conservatism and the failure to utilize to the fullest extent the lessons taught by science."

SPACE TELEGRAPHY.

Wireless telegraphy has proved its utility as a means of communicating with ships at sea and with isolated stations which could not

be reached by cable. Here its utility seemed to cease, because at any one station the transmitter would influence all the receivers within its field of influence, and in turn its receiver would be actuated by all the transmitters within its range of susceptibility. There was therefore no privacy in the messages sent out, for there was no selective system of signalling, and there was, moreover, nothing but confusion when two or more stations tried to communicate with a given station at the same time. The labors of several workers have been directed to the overcoming of this difficulty, and a solution seems to have been reached by Professor Slaby, of the Charlottenberg Technical High School.

Professor Slaby was working on a system of wireless telegraphy for use in the German navy which would not infringe the Marconi patents when he found the solution referred to. He describes his invention in a lecture published in the *Electrotechnische Zeitschrift.* In every station from which messages are sent out by wireless telegraphy there is a tall vertical wire. Electrical oscillations are set up in this wire and their wave-length depends on the length of this wire. The longer the wire the longer the wave length of the electrical oscillation sent out. An idea of this may be gathered from the analogy of a vibrating rod. A vertical rod clamped at its lowest point in a vise and set in vibration oscillates backward and forward to the right and left of its position of rest. The motion is greatest at its upper free end and is zero at the point at which it is clamped. This latter point is called a nodal point or a node. Suppose the vertical position of the rod to be extended upward in space. Begin at the node and to the right of this line and draw lateral perpendiculars to the line of rest of the rod, making the lengths of the perpendiculars proportional to the velocities of the parts of the vibrating rod. We will have a series of lines to the right gradually increasing in length from zero to a maximum representing the velocities of the rod as it moves from rest to its furthest position to the right. If we continue these perpendiculars upward in reverse order to represent the relative volicities as the rod returns to its position of rest and then connect the extremities of these perpendiculars by a line we shall have a curve beginning on the right at the bottom of the rod and extending outward to a maximum distance opposite the top of the rod and gradually returning to the line of extension of the rod until it meets that line at twice the height of the rod. But the rod moves past its position of rest to the left, and a similar curve constructed to the left of the vertical and beyond the first curve represents the excursion to the left and return of the rod to its vertical position. The whole curve, that is, the part to the right plus the part to the left, represents the complete to and fro motion of the rod

or a complete oscillation, and is called a wave. It is evident that the rod is just one-quarter of the length of the wave.

So it is with the electrical oscillation set up in the vertical wire used in wireless telegraphy. The lowest point, or that at which it is grounded, is at rest electrically or is at what is technically called zero potential, and the free end is at maximum potential just as the free end of the rod had maximum velocity. So just as the rod was one-quarter of the wave length, so the length of the wire is one-quarter of the electrical wave length set up in it and radiated into space. Hence by varying the length of the wire electrical waves of any desired length can be sent out into space.

These oscillations will be taken up by another wire whose rate of electrical vibration is the same, and a receiver connected with this wire will be worked by these electric waves. But as the most vigorous part of the oscillation of the rod was the top, so the most vigorous part of the electric oscillation is at the top of the vertical wire. Hence to make sure of the working of the receiving apparatus it should be connected with the top of the vertical wire. This, however is not practicable, and here Professor Slaby overcomes the difficulty by a very simple device.

Reverting to the analogy of the vibrating rod, it is clear that if a rod of twice the length was clamped in the middle and both ends left free there would be developed in the lower half oscillations of the same amplitude as those in the upper half when the rod was set vibrating. In a similar way Professor Slaby attaches to the bottom of the vertical wire, just where it is grounded, a wire of the same length, and electrical oscillations of the same amplitude as those in the vertical wire are set up in this extension wire, which may be straight or coiled. The receiving instruments are attached to this extension wire.

This extension wire forms the main feature of Professor Slaby's invention and enables him to arrange a multiple system of signalling. For this arrangement of wire will respond to waves of only one length, and waves of all other lengths will go to earth at the point at which it is grounded. By varying the length of the extension wire the nodal point of the oscillation will be shifted from the ground point to some point along the extension wire, and thus waves of different lengths will be detected. Thus it is possible to arrange by means of the extension wires the receiving apparatus of a certain station so that only the waves of a certain length will actuate the instruments, and therefore only the messages intended for that station will be received there. Thus secrecy is secured unless the wave length of the transmitter be known. There can be at any one station a number of receivers, each actuated only by its corresponding

transmitter, and hence a number of messages can be received at the same time.

Improvements have been made in the transmitting apparatus by which the length of the wave sent out is completely under control. Experiments are to be made on German naval vessels to determine the length at which signalling with this improved apparatus is possible, and the results are awaited with interest.

NOVA PERSEI.

On February 21 Dr. T. D. Anderson, of Edinburgh, discovered in the constellation Perseus a new star. On the report of this discovery the Harvard photographic plates of that part of the sky were examined. The plates examined were those taken during the month preceding the discovery. The plates of February 2, 6, 8, 18 and 19 showed the new star. Its magnitude, according to the plate of February 19, was less than 10.5. It rapidly grew in brightness, and on Sunday morning it rivaled in brilliancy the beautifully bright star Sirius. Since that date it has begun to grow fainter, but yet remained during the week following a star of the first magnitude, distinctly brighter than its most conspicuous neighbors, which are stars of the second magnitude.

One of the most remarkable things about this event is the fact that only now are we receiving knowledge of an event which took place long ago, may be one thousand years ago. We learn of it only from the few rays of light that have just reached us. They may have been on their journey one thousand years or more. How long these messengers have been traveling we cannot say. They have been with us so short a time that we have not been able to determine what the astronomers call the parallax, by means of which we calculate the distance of the star from us. We know the rate at which these bright messengers traveled, but not knowing how far they have come we cannot say how long ago they started. In fact, the star we see may have been extinct for the last one hundred or perhaps thousand years.

What happened so long ago? What news do these messengers bring us? It is not easy to interpret the message. By quite a general consent the best interpretation has been given by Seeliger. This hypothesis was advanced shortly after the appearance in January, 1892, of Nova Auriga, which was also discovered by Dr. Anderson.

According to this explanation a dark orb traveling through space with a great velocity encounters a nebula or cloud of cosmic dust.

The result of the collision and the friction would be the generation of a great quantity of heat sufficient to render the surface of the dead star incandescent and to vaporize some of its material. Parts of the nebula would also glow from the same cause. They would continue to emit light until they had radiated this heat into space; when cooled down they would again disappear from view.

The spectroscopic study of Nova Auriga supplied the data for this hypothesis. The new star gave two superimposed spectra, indicating two sources of the light received. One spectrum was characteristic of a nebula, the other of an incandescent solid. There is already some indication of a similar condition of things in the present new star Nova Persei. Whether this be the explanation of the phenomena of temporary stars or not the Nova Persei is attracting attention and careful observations are being taken which may throw light on such occurrences. Rev. John Hagen, S. J., Director of the Georgetown College Observatory, has issued a chart of the neighborhood of the new star. Accompanying this chart there is data for observing the brightness of the star and the comparison stars are given. It is intended for observance of brightness while the star is a naked-eye variable. A new chart is preparing for work on the star when it grows too faint for naked eye work.

THE STEAM TURBINE.

The principles of steam engineering have just completed one revolution. They have gone through a circle and have just returned to the starting point. Beginning in the year 120 B. C. with Hero's reaction steam turbine, steam engineering passed through the steam impact engine of Bianca and then the different forms of reciprocating engines to return again to the rotatory turbine as the most efficient form of engine. In Hero's engine the wheel or sphere was turned by the reaction of two jets of steam issuing from two bent pipes inserted at opposite ends of a diameter of the wheel. In Bianca's engine a paddle wheel was set in rotation by a jet of steam blowing against the vanes.

Both of these principles are made use of in the steam turbines of the present day. The blades of the turbines receive motion first from the impact of the steam striking them and secondly from the reaction of the steam leaving them.

Recent experiments with steam turbines show an efficiency of 70 per cent., a result never attained by any piston engine. The steam turbine such as we have it to-day is undoubtedly the coming form of steam motor, for the line of development involves high speeds and

transmission of energy in the form of electricity. In the steam turbine there are no reciprocating parts; there is the rotatory engine adapted for direct connection with electric generators. There is high speed, steadiness of motion and a steam economy higher than that attained by any piston engine yet constructed.

NOTES.

Motive Power for Street Railways.—To understand the rapid application of electricity as the motive power for street railways we have but to compare the cost of operating such roads by electricity with the cost of operating them by other systems. The means of comparison is furnished by the report of the Metropolitan Street Railway Company of New York. According to this report the average cost for horse cars was 18.98 cents per car mile, and then it must be remembered that the cars were much smaller than those used on other systems. The cost for cable cars was 17.76 cents and for electric cars 13.66 cents per car mile. The item of cost, then, is decidedly in favor of electric traction. There is only one other system that may compete with the electric system, and that is the compressed air system. The data furnished from this system as applied in New York on a road in which the round trip is five and a half miles at present gives 17.42 cents per car mile as the running expense. However, it is not fair to compare these figures with those given for electric traction, for the compressor used is of far too great capacity for the work it now does and is capable of doing three times the work at about the same expense. Still it is doubtful if for long distances it would ever prove satisfactory and as cheap as electricity. Electricity has come to remain as the most reliable, most convenient and most economical form of energy for traction on street cars.

Aluminum.—Fifty years ago aluminum was a laboratory curiosity and was worth more than its weight in gold on account of the cost of reducing it. Thirty years ago the annual production was about one ton a year and the cost of the metal was twelve dollars a pound. Twenty years ago its production began to increase on account of a cheapening in the production of sodium, which was up to that time employed in the reduction of aluminum. About this time the price of aluminum fell to five dollars a pound. To-day the industry is on an entirely different basis. It is now produced in quantities not of 70 tons a year, but the annual output reaches 7,000 tons, and the price is reduced to 30 cents a pound. The supply is unable to keep up with the demand. The increased supply was possible by the use

of electricity to reduce the metal, and the demand increases on account of the fine qualities of aluminum and the possibilities of using it more extensively since the price is lowered. This briefly tells the story of an unparalleled development in a branch of applied science.

Metric System.—The committee of the House of Representatives in charge of the bill to substitute the metric system in place of our present system of weights and measures has decided to make a favorable report. Besides the numerous other advantages there is the commercial advantage by abolishing a system that hampers our trade with almost all foreign countries, especially with the South American republics. The English speaking races only hold on to the old clumsy system in spite of every argument of utility and convenience in favor of the decimal system. It is encouraging to note the equally strong agitation in England in favor of the metric system, and if both England and the United States would simultaneously adopt it its application would be easier and more rapid.

New Gutta-Percha.—The report comes from Zanzibar that a new material resembling gutta-percha has been discovered. It is derived from a tree. When the tree is tapped a white fluid exudes which in boiling water coagulates into a substance which in character bears a strong resemblance to gutta-percha. This material becomes very hard on cooling, but while soft it can easily be moulded into any desired shape. Although it is not equal to genuine gutta-percha, still as it is quite suitable for many of the purposes for which the latter is used it will undoubtedly assume a commercial importance.

Count Zeppelin's Airship.—This airship has made another trial, that of October 17 last, which is thus described by Herr Eugen Wolf, who took part in the ascent: "The trial lasted one hour and twenty minutes. The start upwards was first rate. The airship moved at an almost unvaried height of 300 metres and went against the wind. All the steering tests proved the efficacy of the new gear, and the airship satisfactorily answered the movements of the steering apparatus. The horizontal stability of the vessel was wonderful. Any list was easily counteracted by shifting the sliding weight. The speed of the airship was such that when going against the wind it outstripped the motor boats on the lake. In still air its own speed was at least eight metres per second. We descended at full speed in the direction of the airship's shed, rather faster than we expected, owing to an as yet unexplained escape of the whole of the gas in one of the balloons in the forward part of the ship. No damage of any importance happened the ship." The German Emperor has conferred on Count von Zeppelin the Order of the Red Eagle, First Class. In his letter to the Count the Emperor says: "The advantages of your system—the division of the long, extended balloon

into compartments, the equal distribution of the burden by means of two independent engines and a rudder working with success for the first time in a vertical direction—have enabled your airship to move with the greatest speed which has hitherto been attained, and have rendered it amenable to the rudder." The Emperor has placed the advice and experience of the balloon division of the army at the disposal of the Count.

Wireless Telegraphy.—The satisfactory results obtained in testing the utility of wireless telegraphy as a means of communication between the vessels that run from Dover to Ostend and either of the above named points shows that it is practicable. The vessel selected for the test was the Belgian mail packet Princess Clementine. The receiving and sending wires were connected to the foremast, which had been previously increased considerably in height. The land station was between Ostend and Dunkirk at La Panne. The mast used at La Panne was 130 feet high and the distance to Dover 61 miles. As the vessel left Ostend a message was sent to La Panne and messages continued to be transmitted at frequent intervals up to the time the vessel reached Dover. These messages were transmitted at the rate of twenty words a minute. The results were satisfactory beyond what had been expected.

Another invention in connection with wireless telegraphy is an apparatus by which ships may be warned of their approach to danger in time of fog or in places where a simpler means of signaling cannot be employed. A revolving wheel having teeth of varying sizes on its circumference is made to work a Morse key which is connected with a set of wireless telegraph transmitting instruments. The varying sizes of the teeth depress the key for a longer or shorter time, and thus a system of dashes and dots can be transmitted. By a proper arrangement of the teeth on the revolving wheel the dashes and dots may be made to spell the name of a place or vessel. Any vessel coming within the zone of influence of this system and provided with instruments for receiving electric waves can be warned by the ringing of a bell and the reception of the message.

Still another advance in wireless telegraphy is reported. Professor Fleming has announced to the Liverpool Chamber of Commerce that Mr. Marconi has succeeded in transmitting messages a distance of 200 miles, and that messages could be sent simultaneously in both directions and two or more could be received at once at each station. This result indicates that the difficulty of interference of messages has been at least partially overcome.

The Malaria Campaign.—The numerous and extensive experiments conducted during the last two years and the clear results reached leave no doubt as to the method by which malaria is pro-

pagated. The mosquito is convicted. Now attention is turned to the plan of campaign to be followed to stamp out malaria. The first views on the best method of malaria prophylaxis seems on reflection impracticable. The hope that the mosquito would be exterminated by drainage and the use of culicicides is too sanguine. There are very large districts where this cannot be accomplished. Still in some localities joined with a use of mosquito curtains and quinine it will bring about a marked improvement. Still, strange as it may at first appear, the most successful plan of campaign seems to be to work to preserve the mosquito from infection and thus limit the chances of disseminating the parasites. This may be done by a prolonged treatment of patients with quinine, and during the time they have parasites in their blood they should be isolated and protected from mosquitoes by a proper use of mosquito netting.

A Use of Liquid Air.—The cartridges used for blasting trials in the Simplon tunnel consisted of a wrapper filled with some carbonaceous material such as a mixture of equal parts of paraffin and charcoal and dipped into liquid air until they were completely soaked. These cartridges had to be kept in liquid air until they were needed and then put quickly into the shot holes and detonated with a small guncotton primer and detonator. This haste in using the cartridge is necessitated by the short life of the cartridge. Those used at the Simplon tunnel measured eight inches in length and three in diameter and had to be used within fifteen minutes after their removal from the liquid air in order to avoid a missfire. Their use on this account was abandoned, but much time and labor is being devoted to their improvement, especially in Germany.

Historic Astronomical Instruments.—From *Nature* of December 27, 1900, we take the following note, which will be of interest to our readers: "Our attention has been directed to the following surpris-announcement made by the Pekin correspondent of the *Times:* 'In pursuance of their regrettable policy of appropriation, the French and German generals, with Count von Waldersee's approval, have removed from the wall of Pekin the superb astronomical instruments erected two centuries ago by the Jesuit fathers. Half of them will go to Berlin and the rest to Paris. The explanation of this act of vandalism is that, inasmuch as the return of the Court is so improbable, such beatiful instruments should not be exposed to the possibilities of injury when Pekin is no longer the capital.' "

D. T. O'Sullivan, S. J.

Boston College.

Book Notices.

PHILOSOPHIA LACENSIS. Institutiones Juris Naturalis ad usum Scholarum adornavit. *T. Meyer, S. J.* Pars II. Herder: Freiburg and St. Louis, Mo., 1900. 8vo, pp. 26, 852.

With the present volume the *Philosophia Lacensis* the course of neo-scholastic philosophy emanating from Maria Laach, the one-time scholasticate of the German Jesuits, is brought to a close. Begun twenty years ago, shortly after the appearance of the memorable Encyclical of Leo XIII. on Thomistic studies, the *Cursus Lacensis* is to-day the most scholarly and perhaps profound work of its kind that has thus far been produced. As to its eruditional features, it is certainly unrivaled. Its authors have set forth the complete system of Catholic philosophy not only in detail, but in its relations to the manifold forms of alien speculation, past and present. The only other work that heretofore aimed at establishing so full a comparison between the *philosophia perennis* and other systems and phases of philosophy is Sanseverino's well-known *Philosophia Christiana Antiqua Cum Nova Comparata.* The latter work, however, never came within more than a third of completion, where the lamented death of its author left it a quarter of a century ago. It contains no word, therefore, of the movements of thought in more recent years. The *Cursus Lacensis*, however, brings its subject matter close *en rapport* with contemporary speculation. Indeed, there is hardly any philosophical theory or opinion worthy of note that has appeared during the past decade, especially in that radiating centre of new philosophies, Germany, that has not been weighed and sifted. It is perhaps this feature of the work, its references to the recent German literature of philosophy as viewed by neo-scholasticism, that gives it its special importance for the Catholic student.

As regards profundity, however, and particularly clarity of exposition, the work in our estimation has, to say the least, a compeer in the colossal monument reared by Father Urrabni. Nor if we except the references to German philosophy are the *Institutiones Philosophicæ* of the eminent Spanish Jesuit much inferior in point of erudition to the present production of his brethren beyond the Rhine. For the benefit of the reader interested in the subject it may here be said that the *Cursus Lacensis* as it now stands embraces three royal octavos, containing in all about 1,800 pages devoted to Logic, three volumes of almost equal extent on Psychology, two volumes of about half that compass on *Philosophia Naturalis*, one volume rival-

ing the latter in bulk on Theodicy. The first volume on Moral Philosophy contains in round numbers 500 pages, and the second about 850. These figures will help to give the reader some impression as to the amplitude of the series. It should be noted, however, that about one-third, *i. e.*, the last volume of the section on Logic, embraces the matter ordinarily allotted to the department of Ontology, the author, Father Pesch, having subsumed under what he calls *logica realis*, an exposition of the fundamental concepts and principles of General Metaphysics. There are, of course, valid reasons for the latter arrangement. On the whole we prefer the treating of so singularly vital a section of the philosophical system as Ontology under its traditional caption, particularly as such an arrangement gives due emphasis to the objective character of metaphysical concepts, an emphasis that cannot, we believe, be too strongly insisted upon in times when the tendency is to relegate metaphysics to the realm of purely subjective figments.

It should also be noted that the *Cursus Lacensis* provides no treatment of the history of philosophy. We cannot but regard this as the one *lacuna* in the work. The literature of scholastic philosophy is unfortunately inadequate in this department and students interested in the matter had hoped that the present series would provide what is so much needed. An historical exposition of the development of philosophy, with supplementary and critical references to the contents of these volumes, would both enhance the value of the *Cursus Lacensis* itself and promote very considerably the general aim for which the work has been produced. Failing, however, this much to be desired completion, no more fitting crown could have been given to the structure than that which is embodied in Father Meyer's *Moral Philosophy*, a work which keeps quite up to the high standard set by the preceding portions of the course.

The first volume, dealing with *General Ethics*, was published fifteen years ago and was subsequently reviewed in these pages. The matter covered in that volume is confined to the general principles of Ethics, individual and social. The second volume, which, by the way, almost doubles the compass of its predecessor, is devoted to special ethics, to the applying that is, of the general notions and principles of morality to the various relations of human life. The whole falls under the caption *Jus Naturæ Sociale*, and divides spontaneously into *individual right*, *private social right* and *public social right*. Under the first section come the rites of the individual towards God, himself and his fellow-men; under the second are examined the juridic concepts growing out of domestic society and the relations of property; whilst the third and by far the largest portion of the volume is concerned with the rights and duties emanating

from the civil and public relations inherent in the body politic, *Staatsrecht*, as the Germans call it; and from the external relations of nations, international right, the *Völkerrecht* of the Germans.

The lines of treatment here laid down are, of course, those familiar to every student of Social Ethics, essential as they must be to the subject matter itself. The special merit of the work consists in the depth and breadth with which individual questions are examined. Thus, for instance, to the right of property over one hundred pages are devoted. This affords room for a satisfactory examination of the leading features and claims of socialism. A fundamental question of supreme importance is that which centres in the end or purpose of civil society. This the author has discussed very carefully and adequately in no less than six goodly "theses." The functions of civil authority are also treated with the comprehensiveness demanded by such vital topics as the relations of the State to religion, economics, education, etc.

In fact, there is no important question that enters into the perennial organism of moral philosophy or that has grown out of the more complex relationships of modern society, or that has been necessitated by the attacks of scepticism against the basis or framework of Christian Ethics that does not receive in this volume their just measure of consideration. Readers of the "Newer Ethic" may miss in it reference to some names that cast a large shadow in the recent book world; but the line of such reference, whether to orthodox or to heterodox writers, had to be drawn somewhere, and the author has temperately drawn it at the most noteworthy and enduring literature of his subject.

On the whole, we believe we can give the work no more fitting commendation than by saying that it deserves to take a place by the side of the great *Saggio* of Taparelli and the *Moral Philosophie* of Cathrein, the two works that stand easily to the front in the nineteenth century literature of Ethics.

COURSE OF RELIGIOUS INSTRUCTION. Institute of the Brothers of the Christian Schools.

EXPOSITION OF CHRISTIAN DOCTRINE. By a Seminary Professor. Intermediate Course. Part III. Worship. 12mo, pp. xvi., 833. Philadelphia: John Joseph McVey.

This volume completes a course of religious instruction which must appeal to all teachers whose duty it is to instruct others in Christian doctrine; to all students who are trying to acquire such important knowledge, and to all intelligent Catholics who feel every day the necessity of being able to explain the doctrines and cere-

monies of the Church. St. Peter recommended the first Christians to be always ready to give an account of their faith. The same admonition has been given by the Church to her children in all ages. She is confident that if men know her they will love her and follow her teachings, because she is the spouse of Christ, and her doctrines are His doctrines. Those who refuse to listen to her; who persecute her and caluminate her, do so because they are ignorant of her true teachings and her true history.

Catholics themselves are largely responsible for this. We do not speak of those who are poor, hard-worked and unlearned. Through no fault of their own they are prevented from gaining that fuller knowledge which would enable them to enlighten others. But God has given the grace of faith to them, and they are deserving of all honor for preserving it, and submitting humbly to the guidance of His Church. Their lives speak more eloquently than words. But at the present day those who are born and brought up in this country cannot excuse themselves for ignorance of the doctrines of the Church. In this age of schools, libraries and books, if any one remain ignorant of any important subject it must be because he will not enlighten himself. This is certainly true of the Catholic Faith. The explanations of Catholic faith, morals and ceremonial which have come from the press in recent years are so many and so various that every one should be able to prove to the world that the Church is the spouse of Christ, speaking to men by His authority and in His name. The "Exposition of Christian Doctrine" which is completed by the volume before us, is a striking illustration of this truth. In these three volumes the whole field is covered. It is a clear, concise, complete summary of Catholic faith, morals and ceremonial. With this book in hand an apostle could convert the world.

The first volume of the series treated of Dogma, the second of Morals and the third treats of Worship. As worship is the living and active expression of dogma and morals, it follows them in logical order.

In the introduction the plan of the present volume is thus clearly set forth: "It may be divided into four sections: A preliminary section: On *Grace*, without which we can neither please God nor sanctify ourselves. Three principal sections: 1. On *Prayer*, by which we raise ourselves to God and ask His grace. 2. On the *Sacraments*, which are sensible signs that signify and produce grace. 3. On the *Liturgy*, which regulates public prayer, the administration of the sacraments and above all the celebration of the holy sacrifice of the Mass. We recommend the book to priests who have already gained the knowledge which it contains, but who must constantly refresh their memories and verify their statements, and who can no-

where else find all that they need so easily as here. We recommend it to teachers who are using other manuals, because it conflicts with none, but completes all. We recommend it to every Catholic family, because it is a complete library of Christian Doctrine. We recommend it to every intelligent Catholic who ought to know the doctrines and ceremonies of his Church well enough to explain them to others. Finally, we recommend it to all fair-minded Protestants who want to know the truth about this great Christian Organization, the Roman Catholic Church, which claims to speak to all men in the name of Jesus Christ, and by His authority, and demands from all that obedience which they owe to Him. No one can afford to be ignorant of such an organization, and it is only fair to ask herself for her credentials.

THE JESUIT RELATIONS AND ALLIED DOCUMENTS. Travels and Explorations of the Jesuit Missionaries in New France, 1610-1791. The Original French, Latin and Italian Texts, with English Translations and Notes. Illustrated by Portraits, Maps and Facsimiles. Edited by Reuben Gold Thwaites. Vol. LXXI. Lower Canada, Illinois, 1759-1791. Miscellaneous Data. 8vo, pp. 404. Cleveland: The Burrows Brothers.

With this volume the text of the great work is completed. Volumes 72 and 73 will contain an analytical index to the seventy-one volumes of text. In addition to the usual interesting letters, this volume has an important document which enumerates and describes the fiefs and seigniories belonging to the Jesuits in Canada in 1781-88. For the further information and convenience of students the following addenda have been made to the text: A list of the Governors and intendants of New France (1608-1760), and of English Governors of Canada (1760-1805); a catalogue of Jesuit missionaries to New France and Louisiana (1611-1800), prepared for this volume by Rev. Arthur E. Jones, S. J., of Montreal; lists of the documents and illustrations published in this series; a list of authorities (printed and MSS.) cited or consulted in the preparation of the series, and some necessary errata and addenda, inevitable in so long a series as the present.

The text covers an interesting period, for it deals with the close of the war between France and England and the passing of Quebec into the hands of the conqueror. Some of the questions which are now claiming the attention of the United States authorities in the Philippines are here discussed; questions of right to property justly acquired and lawfully held by the Church or communities.

At the end of the volume we have an excellent copy of the oil portrait supposed to represent Pere Marquette, which was discovered in Montreal in 1897. It is the first portrait of the great

missionary and explorer that has been found, and the proofs of its authenticity are becoming stronger every day. The story of its rescue in the shape of a panel, from a hand-cart filled with rubbish and broken boards which two French boys had procured from an old house that was being torn down, and which they were taking home for fire-wood, is very interesting. Fortunately the rescue was made by Donald Guthrie McNab, the well-known portrait painter of Toronto. At first he saw in it only a panel with an old picture painted on it. After keeping it for about two years he cleaned it. This was a very difficult task, for the dirt that covered it was held fast with many coats of varnish. At last after much patient care, because the paint was cracked, the artist saw revealed a face that might have been the work of Rembrandt. Further effort revealed the name of the painter, "R. Roos, 1669," and above it the words, "Marquette de la Confrerie de Jesus." On the back of the panel, which measures 13¾x17¾ inches, and is about half an inch thick, are carved the words, "Pere Marquette." This portrait is a fitting ending to this splendid reproduction of the Jesuit Relations.

MEDITATIONS ON THE LIFE, THE TEACHING AND THE PASSION OF JESUS CHRIST for Every Day of the Ecclesiastical Year. With an appendix of Meditations for the Festivals of Various Saints. By *Rev. Augustine Maria Ilg, O. S. F. C.* Translated from the latest German Edition. Edited by Rev. Richard F. Clarke, S. J. 2 vols., 12mo, pp. 561, 510. New York: Benziger Brothers.

"The present work is principally compiled from an old book of meditations by a Capuchin monk, Father Alphonsus von Zussmerhausen, Definitor and Vicar Provincial, published in Cologne in the year 1712, and entitled "A Mirror of the Virtues Displayed in the Life and Passion of Our Lord Jesus Christ."

A few years ago a copy of this old book fell into the hands of Father Ilg, of the same order. He recognized its merits, brought it to the attention of his superior, and at his request he compiled from it a series of meditations for every day in the year, written in modern language, fitted to the requirements of the present day and suited for the use of priests and religious of both sexes. Those who were familiar with the old book would hardly recognize it in the new. The author of the later work "compares himself to an architect, who being commissioned to restore an old house of solid construction and make of it a modern residence, finds it the better way, instead of repairing here and altering there, to pull down the whole structure and rebuild it on the same sit on a new plan, employing the same substantial materials, and only adding others where they proved inadequate for his purpose. Thus the author took the greater part of his matter—the most solid and valuable stones needed for the edi-

fice he was raising—from the work of the old Capuchin Father; he also introduces many apt quotations from well-known ascetical writings, such as Rodriguez's Christian Perfection and the incomparable Imitation of Christ."

The work is begun with "An Introduction to Mental Prayer in General, and to This Book in Particular." Each meditation consists of an introductory picture and three points. The matter is very clear and very logical. The author seems to have found the secret of giving just enough to excite thought without distracting the mind or destroying individuality.

In the appendix we find meditations for certain feasts of Our Blessed Lady and some of the saints. No particular order has been followed in this department, and the reader will find some names almost unknown to him, while he will search for better known names in vain.

Following the appendix there is an "Index to Meditations Suitable for Retreats," and then an "Alphabetical Index." The appearance of works of this kind is a healthy sign. It indicates the growth of mental prayer. We do not doubt that the present work will prove thought-provoking for many minds, and that is the end of meditation books.

SHORT LIVES OF DOMINICAN SAINTS. By a Sister of the Congregation of St. Catharine of Siena (Stone). Edited, with introduction, by Very Rev. Father Proctor, S. T. L., Provincial of the English Dominicans. 8vo, pp. xxiii., 352. New York: Benziger Brothers

This book contains nearly a hundred names of persons who have been canonized or declared blessed. Nearly all were members of the Dominican Order; some few are included because of their close connection with the order, although they were not actually members of it. They are arranged, not in alphabetical or chronological order, but in the order suggested by the Calendar of the Dominican rite. The lives are short in order that they may be included in one volume, and in order to attract the reader who might be repelled by longer biographies. The principal authorities from which the facts are taken are Marchese's "Diario Domenicano," the Lessons in the Dominican Breviary and the excellent work, "L'Année Dominicaine." The last named work has only reached the end of August, although it already numbers sixteen large volumes.

We find many illustrious names in this compendium. St. Raymund of Pennafort, St. Catharine de Ricci, St. Thomas Aquinas, St. Vincent Ferrer, St. Catharine of Siena, and the great founder of the order, St. Dominic, are but a few of those who stand out prominently.

Father Procter's Introduction is a very valuable part of the work. It sets forth clearly and in an attractive manner the value of the lives of the saints and the profit to be gained from the study of them. It points out in a particular manner the excellence of the lives recorded in this volume. The book ought to do all that the compiler and editor hope for it. Lessons of virtue are best taught by the lives of those who practiced them. Most persons learn by example. Pictures appeal to all children, small and big, young and old. Here are pictures of all the virtues worthy of imitation.

Institutiones Theologiæ Dogmaticæ. Tract. de Sacramentis. Pars I. De Sacr. in gen., Bapt., Confirm., Euch. *Auctore P. Einig.* Treviris, ex Officina ad S. Paulinum, 1900. 8vo, pp. 10, 248. Price, 3 marks.

The preceding volumes of these Institutes of Dogmatics have been successively brought to the attention of our readers. They appeal, of course, primarily to the student and professor in our ecclesiastical seminaries. Their didactic method, clarity and precision of statement and brevity, combined with comprehensiveness of exposition, adapt them perfectly for their end as text-books. The fact, too, that each volume, though part of an organic whole, is complete in itself, has also an advantage in the same connection. The clergy in the ministry will also find these tracts of service for ready reference and as facile instruments for reviewing former studies. Their bibliographical references, which embrace the best authorities, old and new, on their respective subjects, will prove helpful. The present treatises on the Sacraments in general, Baptism, Confirmation and the Eucharist, sustain the merit of the earlier volumes. One more volume, promised for the near future, will complete the work.

Beati Petri Canisii, Societatis Jesu Epistulæ et Acta. Collegit et Adnotationibus Illustravit. *Otto Braunsberger, S. J.* Vols. II., III. Freiburg and St. Louis: Herder. Price, $7.50 per vol.

These two magnificent volumes cover the important period of the life of Blessed Peter Canisius between the years 1556, when he was made provincial of the Jesuits in Germany and founded the College of Ingolstadt, and 1562, when he took a prominent part in the closing scenes of the Council of Trent. The correspondence presents the saintly missionary in the very prime of life, with growing fame and influence. There was scarcely a distinguished Catholic of the age, from Pius IV. and Emperor Ferdinand down, who did not figure among the correspondents of this remarkable man.

He was the acknowledged leader of the great Catholic Reaction in Germany, and thanks to the documents which Father Braunsberger is now bringing to light, we are enabled to follow the process of the reacquisition of German territory step by step. The subject demands more than a mere notice.

THE LAW AND POLICY OF ANNEXATION, with Special Reference to the Philippines. Together with Observations on the Status of Cuba. By *Carman F. Randolph*, of the New York Bar, author of "The Law of Eminent Domain." 8vo, pp. 226. New York: Longmans, Green & Co.

"The annexation of the Philippines is the immediate reason for this book, which, in dealing with the event itself, advocates withdrawal of our sovereignty from the islands and suggests a method for its accomplishment. In the larger and permanent purpose of the book the event is but the text for a general discussion of annexation, with regard to the policies proper for the guidance of the United States in the matter of enlarging their territory, and to the obligations that go with their sovereignty."

This is a very timely book. It is interesting and valuable, not only to those who are in authority and who must deal directly with this important question, but to all citizens, who should understand clearly the reasons that underly the actions of their representatives. It is so easy to learn law from newspapers that generally are the organs of parties or individuals, and are too often the creatures of prejudice. History has too many examples of injustice done in the name of law, but in obedience to public clamor raised by ignorant or wicked men. Such mistakes can be prevented by right-minded and well informed citizens.

THE NEW RACCOLTA; or, Collection of Prayers and Good Works, to which the Sovereign Pontiffs have attached Holy Indulgences. Published in 1898 by Order of His Holiness Pope Leo XIII. From the Third Italian Edition, authorized and approved by the Sacred Congregation of Holy Indulgences. 12mo, pp. 684. Philadelphia: Peter F. Cunningham & Sons.

Here is a complete and authentic collection of the prayers and pious exercises to which the Roman Pontiffs have attached indulgences. Other editions of the book have appeared from time to time, but the present edition was ordered by our Holy Father Leo XIII., because new prayers and good works which have been enriched with indulgences were not contained in previous aditions, and because others had been omitted that were not presented at the proper time.

This book is the authorized translation of the Italian Raccolta, which has the approval of the Holy Father, and is to be regarded by all as the correct and authorized collection of indulgences hitherto granted for all the faithful. "If by chance any doubt should arise

either as to sense of the grant or the conditions requisite for gaining the indulgences, it must be determined solely by this Raccolta which His Holiness has directed to be considered the complete guide."

BIBLISCHE STUDIEN. Herausgegeben von *Professor Dr. O. Bardenhewer.* Freiburg and St. Louis: Herder. Price, $1.20.

The series of "Biblical Studies" begun on occasion of the Papal Encyclical on the Holy Scriptures has gone on increasing in interest and importance and has now reached the sixth volume. The several numbers are the work of the first Catholic writers of Germany and present the results of their studies in a concise and attractive manner.

BOOKS RECEIVED.

TRACTATUS DE GRATIA DIVINA. Auctore *P. Sancto Schiffini, S. J.* Freiburg and St. Louis: Herder. Price, $2.90 net.

TRACTATUS DE DEO TRINO. Auctore *Laurentio Janssens, S. T. D.* Forming Vol. III. of Summa Theologica ad modum commentarii in Aquinatis Summam. Freiburg and St. Louis: Herder. Price, $3.60 net.

PLAIN SERMONS ON THE FUNDAMENTAL TRUTHS OF THE CATHOLIC CHURCH. By the *Rev. R. D. Browne.* Second Edition. 12mo, pp. 514. New York: Benziger Brothers

IN THE BEGINNING (Les Origines). By *J. Guilbert, S. S.*, Superior of the "Institute Catholique," of Paris. Translated from the French by G. S. Whitmarsh. 12mo, pp. 379. Illustrated. New York: Benziger Brothers.

THE INFLUENCE OF CATHOLICISM ON THE SCIENCES AND ON THE ARTS. From the Spanish. 12mo, pp. 160. St. Louis: Herder.

ST. FRANCIS OF ASSISI. By the *Rev. Leopold de Chérancé, O. S. F. C.* Authorized translation from the French. By R. F. O'Connor. Third Edition. Enlarged and Illustrated. 12mo, pp. 411. London: Burns & Oates. New York: Benziger Brothers.

EUCHARISTIC CONFERENCES. Preached in Lent, 1884, in the Cathedral of Notre Dame, Paris, by Rev. Father Monsabré, O. P. Translated from the French by Comtesse Mary Jenison. 12mo, pp. 181. New York: Benziger Brothers.

MARY WARD: A Foundress of the Seventeenth Century. By *Mother M. Salome,* of the Bar Convent, York. With an Introduction by the Bishop of Newport. 12mo, pp. 272. Illustrated. London: Burns & Oates. New York: Benziger Brothers.

LIFE OF THE VERY REV. FELIX DE ANDRIES, C. M., First Superior of the Congregation of the Mission in the United States and Vicar General of Upper Louisiana. Chiefly from sketches written by the Right Rev. Joseph Rosati, C. M., First Bishop of St. Louis. 12mo, pp. 308, with portrait. St. Louis: B. Herder.

MAGISTER ADEST; or, Who is Like to God? With Preface by the Rev. Charles Blount, S. J. 12mo, pp. 388. Illustrated. New York: Benziger Brothers.

ILLUSTRATED EXPLANATION OF THE APOSTLES CREED. A Thorough Exposition of Catholic Faith. Adapted from the Original of Rev. H. Rolfus, D. D., by Very Rev. Ferreol Girardey, C. SS. R. 12mo, pp. 360. New York: Benziger Brothers.

THE SAINTS. SAINT NICHOLAS I. By *Jules Roy.* Translated by Margaret Maitland. 12mo, pp. 200. London: Duckworth & Co. New York: Benziger Brothers.

A SHORT INTRODUCTION TO THE LITERATURE OF THE BIBLE. By *Richard G. Moulton, M. A., Ph. D.*, Professor of English Literature in the University of Chicago. Author of the "Literary Study of the Bible." 12mo, pp. 374. Boston: D. C. Heath & Co.

THE CONFESSOR, after the Heart of Jesus. Considerations proposed to Priests, by Canon A. Guerra, Honorary Chamberlain to His Holiness. 12mo, pp. 165. St. Louis: B. Herder.

LIFE OF OUR LORD AND SAVIOUR JESUS CHRIST. By *Rev. J. Puiseux,* Honorary Canon and Former Student of the Carmelite School. 12mo, pp. 195. Somerset, Ohio: The Rosary Press.

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